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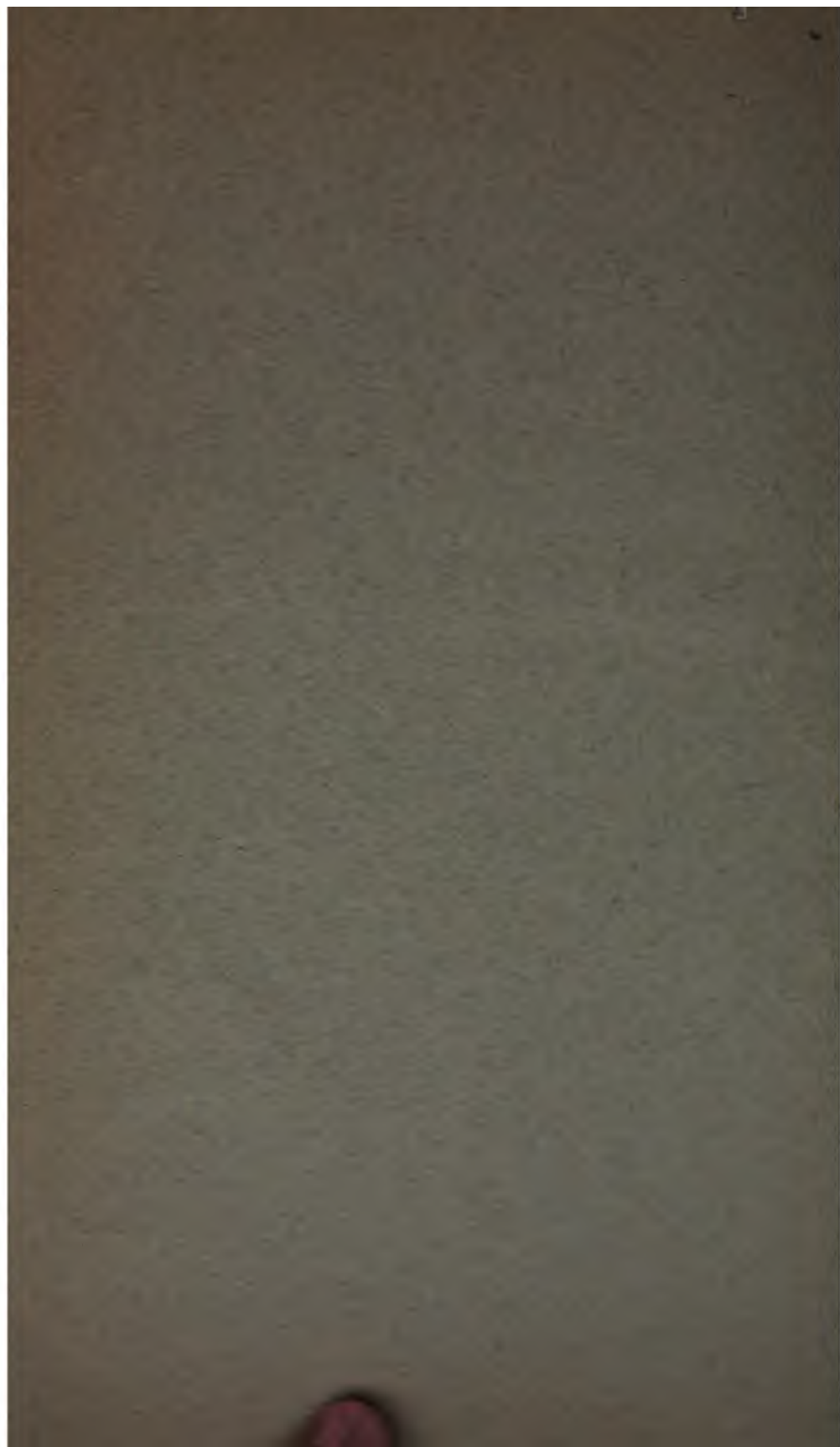
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BULLETIN OF THE UNIVERSITY OF WISCONSIN

NO. 96

ECONOMICS AND POLITICAL SCIENCE SERIES, VOL. 1, NO. 1, PP. 1-66

THE DECLINE OF LANDOWNING FARMERS IN
ENGLAND

BY

HENRY CHARLES TAYLOR, PH. D.

Instructor in Political Economy in the University of Wisconsin

*Published bi-monthly by authority of law with the approval of the Regents
of the University and entered at the post office at
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PREFACE.

The materials which have been used in the preparation of this paper were collected some time ago when the writer had access to the collections of the British Museum and to the Library of the Royal Agricultural Society of England. At the same time materials were collected for a paper on the history of the relations between landlords and tenants in England, which will soon be ready for publication. These studies in the history of English land tenure were undertaken with the hope that from the experience of an older country we might find a clue to the correct understanding of the problems of tenancy and landownership in the United States. While the present paper and the one in preparation are incidental to the preparation of a monograph on tenancy and landownership in the United States, this last is only a part of a more comprehensive study in agricultural economics.

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THE DECLINE OF LANDOWNING FARMERS IN ENGLAND.

INTRODUCTION.

During the twenty years from 1880 to 1900 a significant decline in the percentage of landowning farmers took place in the United States. The facts of this decline are easily obtained;¹ the causes, however, are not so readily formulated. To analyze the forces which are tending to bring about a change in the organization of industrial society, and to observe with sufficient care the laws and customs and other conditions which retard or accelerate the operation of these forces, is a most difficult task. This work is facilitated, however, by studying similar conditions in other countries. Some countries having passed through more stages of economic development than others, it is possible to compare present conditions in a new country with the past of an older country, and thus bring some light to bear upon present day problems.

England offers excellent advantages to the student of historical and comparative agriculture. English agriculture has, perhaps, passed through more stages of economic development than that of any other country. Increasing intercourse with the outside world, and the accompanying changes in the organization of industrial society, have made it necessary for the English farmers of each succeeding generation to adapt themselves to new conditions. These economic changes have had a marked influence upon the relation of the farmers to the land which they cultivate. Two hundred years ago landownership on the part of farmers was common in England; but today it is rare. It has been attempted in this paper to bring together as much evidence as possible upon the conditions and forces which have resulted in this decline in the number of landowning farmers in England.

¹Twelfth Census, Vol. V., p. 689. Percentage of farms operated by owners in 1880, 74.5 per cent.; in 1890, 71.6 per cent.; in 1900, 64.7 per cent.

CHAPTER I.

LAND TENURE IN ENGLAND AT THE CLOSE OF THE SEVENTEENTH CENTURY.

The land of England was held by such varied tenures in the seventeenth century that in order to form a clear notion of the position of farmers, as landowners, at that time, it is necessary to classify those tillers of the soil in accordance with the ways in which they held the land they cultivated; and then to ascertain as nearly as possible the relative importance of each of these classes of farmers. In some parishes in England practically all of the farmers of the seventeenth century owned the land which they cultivated. As a general rule, however, there was a squire or a gentleman or a greater landlord, who owned a large share of the land of the parish and who held important rights in a great deal of the land which he did not own. A parish dominated in this way by a landlord was called a **MANOR** and the landlord was called "The lord of the manor."²

Of the land which was held in fee by the lord of the manor, a portion was kept as a "home farm" and managed by a "bailiff" or hired farmer. As a rule the remainder of the lord's demesne was leased to tenants who paid an annual or semi-annual rent for its use. The most important exception to this rule was found in the southwest of England where "conventional freeholds" or "life leaseholds" were common.

That portion of the land of the manor which was not held in fee by the lord, was owned and cultivated by small proprietors. Some of these small proprietors were *freeholders* and some were *copyholders*. There were two classes of freeholders, namely, freeholders of inheritance and freeholders not of inheritance.

² Laurence: *Duty of a Steward*, p. 59; Marshall: *Rural Economy of Yorkshire*, Vol. I, p. 19; Marshall: *Rural Economy of Suffolk*, Vol. I, p. 6; W. Mavor: *Agriculture of Berkshire*, p. 50.

Freeholders of inheritance were of two classes: fee-simple and fee-tail. Just how nearly this fee-simple freehold corresponds to the modern tenure designated by the same phrase it is not easy to determine. It is true that this tenure, sometimes at least, involved the payment of a small rent and the performance of some service. The fee-tail was a more limited estate in that the possessor of land under this tenure could neither alienate it nor determine its succession; and it may well be questioned if small proprietors held land under this tenure. Of the freeholds not of inheritance we are interested in the "conventional freeholds" which were created when a farmer paid perhaps two-thirds of its value for an estate in the land, which was to last so long as any one of three persons named in the agreement should live, after which the property was to revert to the original owner. But in order to keep this property from reverting to the original owner, it was common to put in a new life whenever one of the three lives came to an end. This was usually agreed to by the landlord upon the payment of a "fine." Farms held by this tenure were said to be "leased out on lives."

The copyhold estates were of two classes: Copyholds of inheritance and life copyholds. In general, a copyholder was one who held his lands in a manor, nominally at the will of the lord of the manor; but the will of the lord was often overruled by the customs of the manor so that he who held a copy of the court roll showing his right to certain lands had as secure a possession as a freeholder. The copyholders of inheritance could dispose of their lands by will, or sell to whomsoever they pleased, and the lord could in no way hinder the heirs or the purchasers from possessing the lands, so long as the customs of the manor were adhered to. The life copyholds were much like the freeholds for three lives, the most important difference being that the customs of the manor determined the character of the life copyhold tenures.* The landlord was not obliged to renew a life copyhold, but usually did so upon the payment of an arbitrary fine. It was true of copyhold estates, in general, that "fines" were due the lord under whom they were held, whenever one tenant succeeded another, whether the change was due to alienation by sale, or to the death of the possessor. Upon the death of the lord or of the

*Blackstone: Bk. II., Chap. 9; Pollock, *Land Laws*, p. 44.

tenant "heriots" were taken out of the copyhold estate. There were other demands made by the lord upon his copyhold tenants but the fines and heriots were the most important.⁴

All tillers of the soil who held lands by any of these tenures which imply ownership, came to be called "yeomen" or "statesmen," in contradistinction to those who paid rent and who were called "farmers."⁵ At the present time, however, the former are called "yeomen farmers," the latter, "tenant farmers."

In order to appreciate the extent to which the yeomen farmers have declined in number and importance, it is necessary for us to ascertain as clearly as possible the position which they once occupied in English agriculture. It is not difficult to find statements, made by modern writers, to the effect that, two hundred years ago, more than half of the English farmers owned the lands which they cultivated.⁶ It is even stated that more than half were freeholders.⁷ On the other hand, another class of writers doubt whether the landowning farmers ever played an important part in English agriculture.⁸

So far as we can ascertain, all attempts at a definite statement as to the numbers of landowning farmers in England in the seventeenth century, are based upon the statistics compiled by Gregory King in his *Natural and Political Observations and Conclusions upon the State and Condition of England* (1696). King gives a "scheme" of the incomes of the several families of Eng-

⁴These heriots and fines were of considerable value. An example given by Laurance (*Duty of a Steward*, p. 140) shows that in 1725 John Todd succeeded his father in the possession of a copyhold of inheritance. A composition for the heriots "due to the lord of the manor at the death of the father" amounted to 56 pounds sterling, and John Todd paid a fine of 100 pounds sterling for "being admitted tenant to his father's estate."

⁵London: *Encyclopedia of Agriculture*, 1831, p. 1123. "Yeomen farmers, small proprietors who farm their own lands, but yet aspire not to the manners and habits of gentlemen." Again, in the glossarial index to the same: "A proprietor cultivating his own estate is not correctly speaking a farmer; to be such he must pay a rent." Pringle, *Agriculture of Westmoreland*, Chap. IV., Sec. 1, mentions "That numerous and respectable yeomanry . . . occupying estates of their own from 10 or 20 to £50 a year" and continues: "These men in contradistinction to farmers or those who hire the land they occupy, are usually denominated *statesmen*."

⁶G. Shaw-Lefevre: *Agrarian Tenures*, pp. 1, 2; E. Cathcart, J. R. A. S. E., Series III., Vol. II., p. 11; Macaulay: *History of England*, Vol. I., Chap. III.

⁷G. C. Broderick: *English Land and English Landlords*, p. 46.

⁸J. D. Rogers in *Palgrave's Dictionary of Political Economy*, Vol. III., p. 687. Also, Mr. Elliott, Secretary of the Board of Agriculture, gave this view in a private discussion of the subject with the writer.

land, calculated for the year 1688. Gregory King did not publish his "conclusions" but allowed Charles Davenant to use his manuscript. In 1699 the latter published King's statistical table, known as *A Scheme of the Income, etc.*, in his *Essay upon the probable methods of making a people gainers in the balance of trade*. About a hundred years later, George Chalmers published, from a manuscript copy in the British Museum, what purports to be the complete and unmodified work as King left it. The following table is a reproduction of parts of the "Scheme" as given in Chalmers' edition.

A SCHEME OF THE INCOME OF THE SEVERAL FAMILIES OF ENGLAND; CALCULATED FOR THE YEAR 1688.*

Number of Families.	Ranks, degrees, titles and qualifications.	Heads per Family.	YEARLY INCOME PER FAMILY.	
			£	s
160	Temporal Lords	40	2,800	.....
26	Spiritual Lords	20	1,800	.....
800	Baronets	16	800	.....
600	Knights	13	650	.....
3,000	Esquires	10	450	.....
12,000	Gentlemen	8	280	.....
5,000	Persons in Office	8	240	.....
5,000	Persons in Office	6	120	.....
2,000	Merchants and Traders by Sea	8	400	.....
8,000	Merchants and Traders by Land	6	200	.....
10,000	Persons in the Law	7	140	.....
2,000	Clergymen	6	60	.....
8,000	Clergymen	5	45	.....
40,000	Freeholders	7	84	.....
140,000	Freeholders	5	50	.....
150,000	Farmers	5	44	.....
16,000	Persons in Sciences and Liberal Arts	5	60	.....
40,000	Shopkeepers and Tradesmen	4½	45	.....
60,000	Artisans and Handicrafts	4	40	.....
5,000	Naval Officers	4	80	.....
4,000	Military Officers	4	60	.....
50,000	Common Seamen	3	20	.....
364,000	Laboring People and Out Servants	3½	15	.....
400,000	Cottagers and Paupers	3¼	6	10
35,000	Common Soldiers	2	14	.....

Total number of Families, 1,360,596.

We are especially interested in the one hundred and eighty thousand "freeholders" and the one hundred and fifty thousand "farmers" given in this table. The "Scheme" as published by Davenant is made on the same plan, but the figures are not in

*Gregory King: *Political Observations and Conclusions*. Section VI. Chalmers' Edition, London, 1802.

every case the same. Davenant gives 40,000 and 120,000 respectively, for the two classes of "freeholders" and calls the first class, "Freeholders of the better sort," and the second class, "Freeholders of the lesser sort," whereas in the table, as given above, we find 140,000 freeholders of the second class. Again, Davenant gives the yearly income per family of the "better" freeholders at £91, and that of the "lesser" freeholders at £55, instead of £84 and £50, respectively, as given above.

The question arises as to which of these tables represents King's work. Davenant says, "Mr. King's modesty has been so far over-ruled as to suffer us to communicate these, his excellent computations, which we can the more safely commend, having examined them very carefully, tried them by some little operations of our own upon the same subject, and compared them with the schemes of other persons, who take pleasure in the like studies."⁹ Chalmers says that Davenant "made great use of these observations by publishing mutilated extracts from a consistent whole."

One gets no suggestion from Davenant that he has modified the figures, but the tradition has grown up that he thought King's figures for freeholders were too high, and reduced them twenty thousand.¹¹ This, however, is only a tradition. No evidence has been found which gives ground for its belief.

But another assumption may be made. It is possible that King found occasion to change the figures in his manuscript after Davenant had made use of it. King lived about thirteen years after the publication of the extracts from his work by Davenant, during which time he might, very naturally, be expected to find reason for modifying certain parts of his manuscript. Could it be shown

⁹Political and Commercial Works, edited by Whitworth, 1771, Vol. II., p. 184.

¹⁰Chalmers's Notice of the Life of Gregory King, p. 397, (1802 edition). King's table is given opposite page 184.

¹¹J. E. Thorold Rogers ("Agriculture and Prices," Volume V., p. 89, also, "Work and Wages," p. 463) seems never to have seen Chalmers's edition of the "Scheme," and takes for granted that the figures given by Davenant are King's figures. The same is true of John Rae (Contemporary Review, October, 1883). Macaulay evidently had both tables at his disposal for he quotes from Davenant's with the remark in a foot-note: "I have taken Davenant's estimate, which is a little lower than King's" (History of England, Vol. I., Chap. III). Toynbee follows Chalmers' edition in the text and says in the foot-note, "Macaulay, following Davenant, thinks this too high and puts them [the freeholders] at 160,000." ("The Industrial Revolution," p. 58). H. De B. Gibbons, in his "Industry in England," gets still farther away from the truth in a foot-note where he states, after giving 180,000 freeholders as King's statement, "Macaulay thinks this too high and suggests 160,000."

that Davenant found occasion to question King's figures and reduce the estimated number of freeholders this might be ground for accepting the more conservative estimate. On the other hand, in case King found his original figures too low and raised them, his final estimate should be counted more trustworthy.

Whatever may be the relative value of the two copies of the "Scheme," the more important question relates to the worth of King's work as a source of material for the writing of economic history. The popular writers pass this question over. But J. A. Hobson says: "King's calculations can only be regarded as roughly approximate."¹² J. D. Rogers says this work of King's "ought never to have been or to be quoted by social historians."¹³ J. E. T. Rogers values this work more highly, however; he says, "The calculations are, I am wholly persuaded, accurate, for Gregory King has rarely, even in modern times, been surpassed in the special and very exceptional power of understanding what is meant by statistical figures."¹⁴

In speaking of the yearly income per family, etc., as given in the "Scheme," Rogers writes: "The estimates are no doubt primarily gathered from the numerous direct taxes levied in the reign of Charles II."¹⁵ When one reads the Parliamentary Act¹⁶ in accordance with which these direct taxes were levied, and examines some of the old tax rolls which are now deposited in the Record Office in London, one is made to feel that this is a probable source of King's information. It should be noted, also, that the context shows clearly that he had these materials at hand.¹⁷ In general the internal evidence points to the conclusion that Gregory King drew upon all the best sources of information and that he was unusually careful in his use of the materials which were avail-

¹² *Evolution of Modern Capitalism*, p. 21.

¹³ *Palgrave's Dictionary*, Vol. III., p. 686. But as Mr. J. D. Rogers mentions the "New Domesday Book" of 1874 as a source on the subject of the yeomanry and does not include it in the list of works which should not be quoted by social historians, we have reason to doubt the value of his judgment on the worth of materials, for this "New Domesday Book" is recognized by such men as Major Craigie, Statistician of the Board of Agriculture, as being "very very unreliable."

¹⁴ J. E. T. Rogers: "Work and Wages," p. 465.

¹⁵ "Agriculture and Prices," Vol. V., p. 89.

¹⁶ See Scobell: "Parliamentary Acts, 1640-1656, Anno 1656, Cap. 12.

¹⁷ A statement in Section VII. of the *Political Conclusions* shows clearly that King used these tax rolls as a source of information; for he there compares the annual values of the land as rated for the 4 S. tax with what he reckons to be the true annual value.

able.¹⁸ We find no evidence that his contemporaries criticised the *Conclusions* of Gregory King; while, on the other hand, evidence of his popularity as an expert in "political arithmetic" is abundant.¹⁹ However we should not think of these figures as nearly so accurate as modern census statistics. They are, at best, "estimates," and given in round numbers. Yet there seems to be no good reason for rejecting these estimates as such. They present "such near approaches" to the truth, says King, "as the grounds we have to go upon will enable us to make."²⁰

Having accepted King's figures as approximately true we are next confronted with the problem of determining the meaning of the terms used.

King gives 180,000 "freeholders" and 150,000 "farmers," for

¹⁸In Section I. King states that "The ensuing treatise depends, chiefly, upon the knowledge of the true number of people in England, and such other circumstances relating thereunto, as have been collected from the assessments on marriages, births, and burials, parish registers, and other public accounts." In the preface mention is made of the great importance of being "well apprized of the true state and condition of a nation, especially in the two main articles, of its people, and wealth." And again, "but since the attainment thereof is next to impossible, we must content ourselves with such near approaches to it, as the grounds, we have to go upon, will enable us to make. However, if having better foundations than heretofore, for calculations of this kind, we have been enabled to come very near the truth; then, doubtless, the following observations and conclusions will be acceptable to those who have not entirely given up themselves to an implicit belief of popular falsehoods. But, the vanity of people in overvaluing their own strength, is so natural to all nations, as well as ours, that, as it has influenced all former calculations of this kind both at home and abroad, so if even these papers may be allowed not to have erred on that hand, I am of the opinion they will not be found to have erred on the other."

¹⁹"The gratitude of Davenant spoke of Gregory King, as a *jewel*, which was fit for any *statesman's cabinet*. This friendly intimation seems not to have been quite disregarded. The expenditure of the wars of William, and of Ann, required, that the public accounts should be stated. . . . This salutary measure was continued, at the commencement of the second of those hostile reigns. Gregory King acted as secretary to the comptrollers of army accounts; he continued, as secretary of the commissioners for stating the public accounts, to the day of his death." After this statement of the high position which King attained because of his superior capacity in the field of political arithmetic, Chalmers continues, "From the tendency of his genius, from the course of his life, from the nature of his employments; we may perceive how qualified he was to estimate the state of the nation." (Notice of the Life of Gregory King, pp. 400-401.) Again Chalmers says of King, "His original genius, his local knowledge, his scientific practice, qualified him, in a high degree, to carry this practical science of public business far beyond Sir William Petty, the original inventor of the art." (Ibid., p. 399.) "Gregory King . . . was a person of such powers, as to distinguish him, in an age, when eminent men, in his several accomplishments, abounded. He who surpassed Petty as a political calculator, must be allowed to have been a master of moral arithmetic." (Ibid., p. 403.)

²⁰Political Conclusions, Section I.

the year 1688. Nothing is said of copyholders, yet it is clear that he includes them under one of these headings. It is certainly a very loose use of the word freeholders that would make it include copyholders.²¹ And yet, if King meant by "freeholders," all those who were legally freeholders either of inheritance or for lives and no one else, then he must have considered all copyholders as "farmers." If this be true there could have been very few tenant farmers or even life copyholders for it is estimated that late in the sixteenth century one-third of the land in England was still copyhold of inheritance.²² But we have evidence that in 1725 tenant farmers were very numerous.²³

King's calculations were probably based upon the revenue returns, as the "pound rate" levied at various intervals²⁴ between 1656 and 1692 was assessed in such a manner as to give the basis for this calculation; for while every occupier of land was required to pay a rate on the annual value of the land which he occupied, arrangements were made so that all rent paying occupiers could deduct the tax from the rent which was due the lord.²⁵ The act regulating these assessments makes no other distinction among the occupiers of land, and as King was a surveyor and not a lawyer the probabilities are that he used the term "freeholder" to include all those who owned the land which they cultivated, and meant by "farmers" none but rack-rent tenants, that is, tenants who pay a rent equal to, or about equal to the annual value of the farms which they cultivate. Had he used *freeholder* in the legal sense it would have included the Lords, Baronets, Esquires, and

²¹ Another writer of the same period makes clear the distinction between freeholders and copyholders, but under freeholders includes only those of inheritance. G. M. The New State of England, pp. 223 to 229, Pt. II., London, 1691.

²² Pollock, p. 44. Based upon Coke; Meitzen, Siedelung und Agrarwesen, Vol. II., p. 139.

²³ In four manors noted by Laurence, Duty of a Steward, pp. 135 to 139, there were in all fifty-six tenants who apparently paid rents annually, to the annual value of the farms they occupied. Further, Laurence gives an abstract of covenants to be observed by all those tenants and publishes the same in his "Duty of a Steward" with the comment that "These covenants will prove of general use to most estates," which suggests that on "most estates" there was a considerable number of rent-paying tenants.

Again, the incomes of the various classes of landlords amounted to 6,285,000 annually, which we are to suppose came from the land. If each of the 150,000 farmers paid a rent equal to one-half the income accorded him by King it would leave 2,985,000 to be made out of *home farms*, courts, sale of timber, etc.

²⁴ Dowell: History of Taxation, Vol. III., p. 81.

²⁵ Scoble's Parliamentary Acts. Anno 1656, Cap. 12.

Gentlemen, who are given as separate classes. This suggests that King was using the term in a popular or loose way and certainly not in a strictly legal sense. And again, at that time the word "farmer," when applied to cultivators of the soil, meant a rent-paying tenant, and had the term been used to include all operators of farm land as the word is most commonly used in the United States today, it would have included the 180,000 "freeholders" given in King's "Scheme."^{26 27}

Thus from all the evidence which we are able to bring to bear upon the subject it would seem that the only tenable hypothesis is that King's division into "farmers" and "freeholders" was made upon an *economic* rather than a *legal* basis; and that under "farmers" he included what we now designate as tenant farmers, and under "freeholders" he included all landowning farmers.

Counting one "home-farm" for each greater landlord, esquire,

²⁶ Meltzen takes for granted that copyholders are included under "freeholders" in King's figures, but apparently counts the "life leaseholders" as "farmers." This interpretation leaves a larger number of freeholders of inheritance than if the life leaseholders were counted as freeholders, and thus seems to emphasize the importance of the landowning farmers. But Meltzen's interpretation is doubtless wrong for, in the south-west of England where these leaseholders were most common, they were rated under the property tax both as proprietors and occupiers, and it would have been difficult if not impossible for any one to have made a division on any other basis than that of rent-paying and non-rent-paying occupiers. (See Meltzen's *Siedelung und Agrarwesen*, Vol. II., pp. 139, 140. See also Worgan, *Agriculture of Cornwall*, Chap. II., Sec. I.)

²⁷ An example of the way in which these terms were used is found in Norden's "Surveyor's Dialogue" which was published in 1607. (Page 81 of the 1618 edition.) The text reads as follows: "Lord . . . as far as I can perceive, an observing and painful husband liveth, fareth, and thriveth as well upon his Farme of rack rent, as many doe that are called Freeholders, or that have leases of great value for small rent. Surveyor. There is some reason for it. . . . Some Freeholders and Lessees of great things of small rent, bring up their children too nicely," etc. The marginal index, parallel to the text, reads: "The reason why some Farmers live as well as some Freeholders." It is clear that the term *farmer* as used in the marginal index designates a man living upon "his Farm of rack rent" while *freeholder* as there used seems to designate freeholders proper as well as others that have "leases of great value for small rent." This shows clearly enough how the term *farmer* was used and certainly suggests that in brief statements and for general purposes the term *freeholder* was used in a loose way to include all the classes who by any form of tenure owned the land they cultivated. Yet we may be in danger of making too much out of this marginal index. It may be that the author thought it sufficient to mention one of a class, in the margin, and had no intention of using *freeholder* to include the others mentioned in the text. But regarding the usage of the term *farmer* there can be no doubt, and as King is using the two terms to include all the classes mentioned by Norden in the text, it would certainly be wrong to include under farmers others than "rack rent" tenants. Thus all copyholders and life leaseholders must fall into the only other class.

and gentleman, and one farm for each of King's "freeholders" and "farmers," there were in all 356,560 farms in England in 1688. Of these, 26,560 or seven and one-half per cent were "home farms," and, if our interpretation of King's figures is correct, 150,000 or forty-two per cent of the whole number of farms were occupied by tenant farmers, while the remaining 180,000 or fifty and one-half per cent, were owned and occupied by the various classes of freeholders and copyholders,—that is, by landowning farmers.²⁸

²⁸There were 380,179 farms in England in 1895. We know that much land has been brought into cultivation since 1688, and that the size of farms has increased.

CHAPTER II.

SOME EIGHTEENTH CENTURY TENDENCIES.

Before passing to the close of the eighteenth century, at which time it is possible to get a detailed view of the position of the land-owning farmers in the various counties of England, it may be well to note some of the tendencies in the agricultural developments of that century.

The names of Jethro Tull and Charles Townshend are associated with movements most significant in the history of English agriculture. These great agriculturists carried on their important experiments during the second quarter of the eighteenth century. With the name of Tull should be associated the word *tilth*; and the fact that his contemporary was called "Turnip Townshend" suggests at once the phase of agricultural improvement in which he was interested. Tull, in his *Horse-Hoeing Husbandry*, emphasizes the importance of pulverizing the soil. "The chief art of husbandry is to feed plants to the best advantage," says Tull, and he believed that, in the feeding of plants, tillage is much more important than the application of fertilizers. He devotes one chapter of the book to the Pasture of Plants. In this chapter he emphasizes the importance of dividing the soil into fine particles in order that the plants may find "pasture" for their roots. The important field crops of the time were all sown broadcast, so that it was difficult, if not impossible, to cultivate the crops while growing, and the only chance of giving tilth to the soil was during the fallow year. To surmount this difficulty, Tull invented a drill, for the sowing of all kinds of grain and roots, in order that these crops could be cultivated between the rows while growing. He also invented a horse-hoe with which to cultivate the drilled crops.²⁹

²⁹Tull's *Horse-Hoeing Husbandry*, the 1829 edition, with a preface by William Cobbett; Cathcart, Earl: Jethro Tull, his Life, Times, and Teaching, J. R. Agr. Soc., Eng., 3d Series, Vol. II., pp. 1-41.

The name of Townshend is most closely associated with the introduction of turnips and clover into England, and with the reorganization of the English field system. The introduction of turnips, which could be cultivated while growing much more satisfactorily than could the small grains, enabled the farmers to dispense with the fallow wherever this crop would thrive. As the production of a crop of roots did not require a great deal more labor than the caring for a bare fallow, it was only necessary that an increased demand for beef and mutton should increase the value of fodder crops sufficiently, in order that turnips should be very generally introduced. Upon the introduction of roots and clover, the old three-field system of crop rotation was replaced by the "Norfolk four course system," which consisted of a root crop, followed by spring grain with which clover and grass seeds were sown; and the third year the hay crop was removed in time to plow the land for sowing wheat or rye.³⁰

To the names of Tull and Townshend should be added that of Bakewell—the third member of the trinity of great men whose names have been most closely associated with "the new agriculture." Bakewell flourished at Dishley, in Leicestershire, from 1760 to 1795, and produced the necessary complement to good culture and fodder crops, namely, a breed of mutton-producing sheep and a breed of beef-producing cattle.³¹

This "new agriculture" is of interest here because it led to an increase in the size of farms,³² and to the enclosure of the common fields, both of which movements had a marked influence upon the status of the landowning farmers. In the agricultural literature

³⁰ Prothero, R. E.: *The Pioneers and Progress of English Farming*, Chap. IV.

³¹ Prothero, R. E.: *Ibid.*, Chapter V.; Housman, Wm., Robert Bakewell, J. R. Agr. Soc., Eng., 3d Series, Vol. V., pp. 1-31.

³² Hunter's *Georgical Essays*, Vol. II., pp. 201 to 204, by George Brown, "On the Size of Farms." "An improved system of husbandry requires that the farm upon which it is to be carried on should be of some extent, else room is not afforded for the different crops necessary to complete a perfect rotation of management. The farmer, who practices husbandry upon judicious principles, should not only have his fields under all sorts of grains, but likewise a sufficient quantity of grass and winter crops, for carrying on his stock of cattle and sheep through all the different seasons of the year. By laying out land in this style, the economy of a farm is soon regulated, that, while improvements progressively go forward, too much work does not occur at one time, nor occasion for idleness at another. This . . . cannot, in the nature of things, be justly and accurately arranged, when the farm is of small size. . . . Upon 50 acres, labor may not be afforded for half a team; the enclosures would perhaps be a few acres, and the farmer would go to market and buy a single beast, thereby affording

of the early part of the eighteenth century, one reads of the great benefits to be derivd from the enclosure of the common-fields for the purpose of adopting the new agriculture; and these enclosures often involved the buying out of small freeholders who held rights over the commons along with the lords of the manors. Laurence,³³ who wrote in 1727, taught with emphasis that "A Steward should not forget to make the best enquiry into the disposition of any of the freeholders within or near any of his lord's manors to sell their lands, that he may use his best endeavors to purchase them at as reasonable a price as may be for his lord's advantage and convenience. Some instances there have been of stewards, who, after they have made haste to be rich, have made these enquiries for their own sakes, and have purchased out the freeholders, thereby making an estate for themselves, even within their own lord's manors; insomuch that sometimes I have known it so ordered that the lord's tenants have been called to do suit and service at his own [the steward's] court. But, for the sake of honour and honesty, I hope these instances are rare; and so I content myself to have given this hint, still persuading the vigilant steward to be zealous, for his lord's sake, in purchasing all the freeholders out as soon as possible especially in manors where improvements are to be made by *inclosing* commons and common-fields; which (as everyone, who is acquainted with the late improvement in agriculture, must know) is not a little advantageous to the nation in general, as well as highly profitable to the Undertaker."³⁴

opportunity for spending half the year in idleness, wasting the ground by a number of fences, and occasioning more expense than the whole profit would repay. . . .

"Besides, an improved system of husbandry requires the farmer should be possessed of an adequate stock, a thing in which small farmers are generally deficient. It is an old proverb, the truth of which I have too often seen exemplified, 'that the poor farmer is always a bad one.' Allowing he has knowledge, he cannot reduce it to practice, for want of the necessary means.

"With regard to the question, whether large or small farms are generally best managed? I apprehend very few words will suffice. Who keeps good horses, and feeds them well? Who makes the completest fallow, takes the deepest furrows, and ploughs best? Who has the greatest number of hands, and sufficient strength for catching the proper season, by which the crop upon the best of grounds is often regulated? Who purchases the most manure, and raises the weightiest crops? I believe, in general, these questions must be answered in favor of the large farmer. If so, it follows that the prevalence of small farms retards improvement."

³³Duty of a Steward, p. 36 *et seq.*

³⁴It should be noted that in urging the steward to buy up the small freeholds,

The writer has not found evidence showing any great progress in this direction until later in the eighteenth century, but there is reason for believing that Laurence's advice was acted upon many times during the next sixty years.³⁵ In 1786, Marshall records in detail an inclosure where the proceedings seem to have been in exact accordance with this advice.³⁶

Contemporaneous with the new agriculture, and perhaps it is not too much to say making the new agriculture necessary and possible, was the enormous growth of English manufactures and commerce. These lines of development greatly increased the demand for agricultural products so that by the end of the eighteenth century the price of such products had greatly risen. The high prices which could be obtained for the products of the farm gave high values to land and made larger farms and intensive culture extremely profitable. It required a great deal of capital to stock a large farm and cultivate it in accordance with the new methods. To own both land and capital required relatively great wealth; and the rural economists of the time advised farmers to use their capital in stocking large farms rather than to invest nearly all they had in buying land, in which case the

economic and not political reasons are given by Laurence. Toynbee quotes Laurence but does not go far enough to bring out this fact.

Cunningham and Toynbee used to discuss this subject when together. Toynbee claimed that the motive which led to the buying out of the freeholders was desire for political power and social prestige. (See "The Industrial Revolution," pp. 63, 64.) Cunningham claimed that the motive was economic and not political. (See "English Industry and Commerce—Modern Times," Section 282.)

³⁵Marshall: *Rural Economy of Norfolk*, Vol. I., p. 6; Vol. II., p. 365; *Rural Economy of Yorkshire*, Vol. I., p. 50.

³⁶In the parish of Felbrigg, in Norfolk, "some seven or eight years ago, Mr. Wyndham, who is Lord of the Manor, was also the sole proprietor in this parish, excepting one small farm, of seventy pounds a year, belonging to a young man, a yeoman, just come of age. An extensive, heathy waste, and some common-field lands, were desirable objects of inclosures; consequently, the possession of this young man's estate became an object of importance to Mr. Wyndham. Steps were accordingly taken towards obtaining the desired possession; not, however, by threats and subterfuges, too commonly but very impolitically made use of upon such occasions; but by open and liberal proposals to the young man, the joint proprietor; who was made fully acquainted with the intention; and frankly told that nothing could be done without his estate. He was, therefore, offered, at once, a specific and considerable sum, over and above its full value to any other person; and, to ensure the object in view, he had, at the same time, an offer made him of a considerable farm, on advantageous terms. The young man being enterprising, and his little estate being, I believe, somewhat encumbered, accepted the offer, sold his estate, and agreed for a farm, consisting partly of old inclosure, in part of common-field land, and in a still greater proportion of the heath to be inclosed."—*Rural Economy of Norfolk*, Vol. II., p. 365.

farms would be too small and too poorly stocked to be most profitable. It came to be the argument that, whereas a farmer could realize no more than three per cent on investments in land, he could make a profit of ten per cent by using it in stocking a farm.²⁷

The manufacturing industries did not simply expand during this period, they changed their form of organization; and this change in organization had an important influence upon the small farmers of England. As the factory system became established, the domestic system of manufacturing was no longer profitable, and the small farmers who had depended upon spinning and weaving for a part of their income were deprived of this means

²⁷James Anderson is the author of a short article published in Hunter's *Geographical Essays*, Vol. VI., p. 213, (York, 1804), which is entitled, "The Bad Consequence of a Farmer Lessening his Capital by the Purchase of Land." The article reads as follows: "Those who are fond of political calculations may have here full scope for their ingenuity, by supposing that two men of equal spirit, knowledge, and capital, set out in the agricultural line. One of them as a farmer, on a lease; and the other as a small proprietor, or yeoman. Let the capital be taken any how at random; say, £2000. The yeoman, we shall say, lays out £1500 of that sum in the purchase of a farm, which at thirty years' purchase [that is, thirty times the annual rent or annual value], would be worth £50 a year, and he has 500 left for stocking and improving it. The other leases a farm, which, at a fair rent, is worth 200 a year. Let us follow out the calculation,—first, in regard to the profits that the different occupiers themselves can enjoy, and the rate at which their families can afford to live; and, second, with regard to the augmentation of agricultural produce that each of them could afford to the state; and let this calculation be continued for a considerable number of years. Then strike the balance, and see what an amazing difference!"

Again, in recent times when the subject of restoring the old order of yeoman farmers was being agitated, James Caird (*J. R. Agr. S. E.*, Series III., Vol. I., p. 27) gives a very clear statement of the problem suggested by James Anderson three-quarters of a century earlier. Caird writes: "There are two capitals employed in British agriculture; that of the landowners and that of the farmer. The first, which is the land itself, and the permanent improvements upon it, had hitherto been certain and safe, and, therefore, yielding a small, but regular, return; the other, the livestock and crops, subject to risk of seasons, and speculations, and liable to compensation prices, requiring a much larger percentage to cover risk. The capitalist is content with 3 per cent for his heretofore secure investment, which carried with it also influence and social position. A farm worth £50 an acre for the freehold needs a further capital of £10 an acre to provide the farmer's capital for its cultivation. The landowner is satisfied with a return of 3 per cent on his £50, while the tenant looks for 10 per cent. for management and risk and interest on his £10. Let us suppose that the farmer has a capital sufficient to buy 100 acres at this price, and stock them; he would get for his £5,000, invested in freehold, £150, and for his £1,000, farm capital, £100; together, £250. But if he followed the custom of his country and used the whole of his capital in cultivating another man's land, he would with his £6,000 hire 600 acres, on which his returns ought to be £600. He, in truth, thus trades on the capital of the land owner, practically, let to him at the moderate rate of 3 per cent, which he converts into a trade profit on his own capital of 10 per cent.

of supplementing the returns of their small holdings. Some of these small farmer-manufacturers were absorbed by the large industries of the towns, others turned their entire attention to agriculture and became prosperous farmers, while others were reduced, in time, to the ranks of the agricultural laborers.

But these are not the only ways in which the growth of manufactures and commerce influenced rural affairs. Many who had made their fortunes in manufactures or in commerce, desired to own country homes. These country homes often consisted of very small areas with villas built upon them, but more commonly, owing to an "inordinate desire" to be connected with the new agriculture, the wealthy merchants and manufacturers purchased farms and operated them, not for profit, but for pleasure.

While farming for pleasure led to the buying out of many landowning farmers in the vicinity of the large centers of wealth, this was of less permanent significance than the fact that many of the men who had acquired wealth wished also to acquire social and political position; and this could be done most readily by becoming great landlords. This led many of the new men of wealth to buy land and establish their families upon large estates. In these various ways the reorganization of industry in England at the close of the eighteenth century tended to reduce the number of farmers who owned the land which they cultivated, and to increase the numbers of great landlords and of tenant farmers.

CHAPTER III.

THE LANDOWNING FARMERS IN ENGLAND AT THE CLOSE
OF THE EIGHTEENTH CENTURY.

There is a great abundance of material relating to the condition of the landowning farmers in England at the close of the eighteenth century. Marshall's well known treatises on *Rural Economy*, consisting of separate two volume works on various districts, were followed, in 1794, by an agricultural survey, made under the direction of the Board of Agriculture, which covered every county of Great Britain. The reports of those who made this survey were corrected, rewritten and republished, county by county, during the next ten or fifteen years. In their final form these reports give a well systematized description of English agriculture as it was at the close of the eighteenth century. The present chapter is based principally upon these two collections of material.

While the material is plentiful, it is not entirely satisfactory; yet any one willing to read the necessary mass of details may gain a very good idea of the subject from these sources. With such a mass of details to deal with, it is difficult to decide upon a method of presentation. It will be necessary to use the exact language of the sources in many cases. Quotations often make it necessary to include much that is not important, however, and to avoid this the system of paraphrasing will frequently be resorted to.

The material in hand shows a distinct decline in the number of landowning farmers in some parts of England, a replacement of the old yeomen farmers by successful business men in other parts, while the position of this class of farmers, throughout the greater part of England, had, perhaps, not materially changed since the close of the seventeenth century.

SECTION I.

EVIDENCES OF DECAY.

Before the new agriculture was introduced there were many small owners in Norfolk who cultivated their own land. Instances are noted of parishes which had at one time been occupied entirely by this class of farmers. But by 1787 there had been a striking decline in the number of those belonging to this class. Marshall says that the small proprietors saw all about them tenant farmers, whom they had held as their inferiors, reaping great profits and rising to a degree of affluence superior to their own. The tenant farmers were able to live in a style too extravagant for the small proprietors, and this naturally made the latter dissatisfied with their position, "and either launched out into extravagance ill suited to their income, or *voluntarily* sold their comparatively small patrimonies, in order that they might, agreeably with the fashion or frenzy of the day become great farmers." The lands owned by these yeomen farmers fell into the hands of men of fortune and became united with their large estates.³⁸

It was remarked by Young³⁹ that in Hertfordshire the farmers scarcely ever invested in land. The suggested explanation being that these farmers were finding it more profitable to use their surplus funds in renting larger farms and cultivating their land more intensively rather than in buying land.

There never were many "small estates" on the wolds of the East riding of Yorkshire, and by the close of the eighteenth century there were still fewer than formerly. When the common fields were enclosed the larger proprietors very generally bought out the smaller ones, because the latter were unequal to the expense of an enclosure.⁴⁰

A "large proportion" of the county of Westmoreland was still possessed by "yeomen who occupied small Estates of their own from ten to fifty pounds a year," but this class of men was on the decline. "Turnpike roads," says Pringle, "have brought the

³⁸ Marshall: *Rural Economy of Norfolk*, Vol. I., pp. 6-7; also A. Young: *The Agr. of Norfolk*, Chap. II.

³⁹ *The Agr. of Herts*, C. II., S. I.

⁴⁰ H. E. Strickland: *The Agr. of the East Riding of Yorkshire*, C. II., S. I.

manners of the capital to this extremity of the kingdom. The simplicity of ancient times is gone. Fine clothes, better dwellings, and more expensive viands, are now sought after by all. This change of manners, combined with other circumstances which have taken place within the last forty years, has compelled many a *statesman* to sell his property, and reduced him to the necessity of working as a labourer in those fields, which perhaps he and his ancestors had for many generations cultivated as their own."⁴¹

SECTION II.

THE YEOMEN REPLACED BY GENTLEMEN FARMERS.

It has been noted that the great popularity of agriculture in England a hundred years ago, led many wealthy merchants to move into the country and become "Gentlemen farmers." To determine to what extent this movement influenced the character of landowning farmers, by substituting gentlemen farmers for yeomen,⁴² is the purpose of this section.

The number of landowning farmers was increasing in Middlesex. Many of them were not farmers by profession, however, but men who had made fortunes in London or elsewhere, and who had taken up farming for pleasure.⁴³

Property in Hertfordshire was much divided. The good roads, the balmy air, the beauty of the country, and its nearness to the capital are said to have made this county a favorite residence for the men of wealth who wished to move to the country for a part of the year. As a result "great numbers" had purchased land "for building villas."⁴⁴ This may account in part for the fact mentioned in the last section, that the Hertfordshire farmers had ceased to invest in land. Ordinary farmers cannot afford to pay an extra price for land because of good air and

⁴¹ A. Pringle: *Agr. of Westmoreland*, Chap. II., Sec. I; Chap. IV., Sec. I.

⁴² "Yeoman farmers," says Lowdon (*Encyc. of Agr.*) "are small proprietors who farm their own lands, but yet aspire not to the manners and habits of gentlemen." While we mean by *gentlemen farmers* men who are independent and who farm primarily for pleasure, and who live in a style comparable to the Gentry and who do not associate with the "Working farmers."

⁴³ J. Middleton: *Agriculture of Middlesex*, Chapters II. and IV.

⁴⁴ A. Young: *Agriculture of Hertfordshire*, Chapter II., Section I.

beautiful surroundings, while these circumstances are of greater value than good soil to the gentlemen of leisure.

This same movement was going on to the south of London, in Surrey, where many large estates had been broken up into small holdings to supply the demands of the men of wealth who wished to have country homes.⁴⁵

In Lancashire the demand for landed property had been much on the increase for several years, owing to the fact that persons in trade were turning their attention to the cultivation of the soil, and owing to "a constant desire among the labouring classes of society to acquire small properties of this nature."⁴⁶

"There are a few counties," says Holland⁴⁷ "of equal extent with Cheshire, in which the number of wealthy landowners seems so considerable. . . . At the same time the number of smaller landowners is not apparently less than in other counties. The description of this latter class has however been very much altered of late years. From the advantages which have been derived from trade, and from the effects of the increase of taxes, which have prevented a man living with the same degree of comfort on the same portion of land he could formerly, many of the old owners have been induced to sell their estates, and new proprietors have spread themselves over the county, very different in their habits and prejudices. It may be doubted whether the change on the whole has been disadvantageous. Land, when transferred, is generally improved by its new possessor. With a new, and often a more enlightened view of its advantages and resources, he brings with him the means and the disposition to try experiments, and give to his new acquisition its greatest value. . . . He builds, drains, and plants; and by his spirit and example stimulates all around him to increased exertions."

The significance of this passage is rendered very clear by the footnote which was probably written by Sir John Sinclair.⁴⁸ The note is signed J. T. S. and reads as follows: "The loss of the old English Yeoman will nevertheless be regretted: his attachment to his home, and to the laws and religion of the country; his submission to government; his respect for all who were above

⁴⁵ Agriculture of Surrey, Chapter II., Section I.

⁴⁶ Dickson: Agriculture of Lancashire, C. II., S. I.

⁴⁷ Cheshire, Chap. II., Sec. I.

⁴⁸ President of the Board of Agriculture, when the survey was made.

him, and affection for all who were below him, rendered him a most useful and valuable member of the community. He was a man contented with his situation, and anxious for the solid and permanent prosperity of the land in which he had been born and educated. He honoured antiquity of possession from principle, because he connected the permanence of families with the real welfare of the state; he encouraged the sentiment from prejudice, because it conferred honour on himself. He had his own pride of birth; and the property he had derived from ancestors he wished to leave unimpaired to posterity. But his pride never was, nor could be, offensive to the poor. He was too little raised above them for their envy, and they had always seen and known him what he was. He had been brought up amongst them, and on all occasions took part in their concerns. He was the link which connected the gentleman and the farmer; and as both were willing and desirous of associating with him on friendly terms, his existence gave a concord and harmony to society; created a common knowledge and interest in all that was passing; and blended into one whole the welfare of each respective neighborhood."

SECTION III.

THE POSITION OF THE YEOMAN FARMERS IN THE VARIOUS PARTS OF ENGLAND WHERE NO EVIDENCE OF THEIR DECLINE IS GIVEN.

While the yeomen had abandoned agriculture or become tenant farmers in some parts of England, and had been replaced by gentlemen farmers in other parts, no evidence has been found to indicate that the status of this ancient class of landowning farmers had materially changed throughout the greater part of the country by the close of the eighteenth century. By ascertaining the position of these small proprietors at the close of the eighteenth century, we shall be in a better position to appreciate the significance of the decline in the numbers of this class during the nineteenth century.

The county of Cumberland had long been noted for its yeomen farmers, or *statesmen*, as they are called locally. There were said to be few counties in England where property in land was divided

into such small parcels, and where those small properties were so universally occupied by their owners as in Cumberland. The annual value of these small estates varied from five to fifty pounds; but the value of most of them ranged from fifteen to thirty pounds a year.⁴⁹ By far the greater part of the county was held under lords of manors, "by that species of vassallage, called *customary tenure*; subject to the payment of fines and heriots, on alienation, death of the lord, or death of the tenant, and to the payment of certain annual rents, and performance of various services, called *Boon-days*, such as getting the lord's peats, ploughing and harrowing his land, reaping his corn, haymaking, carrying letters, etc., etc., whenever summoned by the lord. We cannot pretend to be accurate, but believe, that two thirds of the county are held by this . . . tenure, principally in those small tenements mentioned above. The remaining part is mostly freehold, which has increased with the inclosure of commons, and sometimes whole parishes, or manors, have been enfranchised on these occasions."⁵⁰ These small proprietors, locally called *statesmen*, were not looked upon as likely to adopt the new agriculture very readily. They "seem to inherit with the estates of their ancestors, their notions of cultivating them, and are almost as much attached to the one as the other. They are rarely aspiring, and seem content with their situation; nor is luxury in any shape an object of their desires. Their little estates, which they cultivate with their own hands, produce almost every necessary article of food; and clothing they in part manufacture for themselves. They have a high character for sincerity and honesty, and probably few people enjoy more ease and humble happiness."⁵¹

As has been stated a large proportion of the county of Westmoreland was possessed by landowning farmers. These yeomen were said to be gentle and obliging when treated with kindness and respect, but the consciousness of their independence is said to have made them impatient of oppression or insult. They lived poorly and worked hard. Some of them in the vicinity of Kendal, did weaving for the manufacturers of that town during the intervals when they had little agricultural work on hand. But the evidences of their decline were already present.

⁴⁹Bailey & Culley: Agriculture of Cumberland, Chap. II., Sec. I.

⁵⁰Ibid.

⁵¹Ibid., Chap. IV., Sec. I. Above Chap. III., Sec. I.

In the northern part of Lancashire the change from yeomen to gentlemen farmers, characteristic of the southern part of that county, was not in evidence. In the northern part of the county "a great portion" of the land was still owned and occupied by yeomen.⁵²

In Northumberland, small estates were found in the southern and middle parts of the county, but very rarely in the northern part. Estates varied in their annual value from twenty to upwards of twenty thousand pounds. There were two or three manors of customary tenants "toward the head of the South Tyne," and there were some life-leaseholds, but most of the landed property was freehold.⁵³

We know little of this class of men in Durham. It is clear that on the lands under the control of the Bishop of Durham, there were copyholders who held their lands "by copy of court roll, kept and recorded at Durham, in the Halmot Court of the Bishop, as lord of the several manors wherein such estates were held."⁵⁴ There were some life leaseholders, and most probably some freeholders in the southern part of the county, who occupied their own lands, but farther than this we find no direct evidence. However the Report on Durham was written by one of the men who reported on Northumberland and Cumberland, and while much attention was given to those who cultivate their own lands in those two counties, this class is not directly mentioned in Durham. On the other hand there is more mention of farmers and their holdings; and Pringle, writing at the same time, of Westmoreland, and speaking of those who occupy their own lands, said: "These men, in contradistinction to farmers, or those who hire the land they occupy, are usually denominated statesmen." Hence our general impression is that there were few Yeomen in Durham at the close of the eighteenth century. A study of the election returns for 1832 seems to verify this conclusion.

In the election records of that year are given the number and qualifications of the voters for the Northern Division of the county of Durham. In the Durham District there were 795 votes cast. And the list of qualifications shows 48 freeholders of land

⁵² Balley & Culley: *Agriculture of Northumberland*, p. 24.

⁵³ *Ibid.*, p. 25.

⁵⁴ J. Balley: *Agriculture of Durham*, Chap. II., Sec. II.

or estates, 197 occupiers of land and a scattering few leaseholders and copyholders. In the Chester-le-Street District, there were 635 votes cast, and their qualifications show 6 freeholders of land, 14 copyholders and 100 occupiers of land.

While the yeomanry were practically extinct in the East Riding of Yorkshire, a very different state of affairs existed in the other divisions of that county. About one-third of the North Riding was owned by Yeomen. "Much the largest proportion" of the dales of the moorlands of this Riding was in the possession of this class of men. The annual value of their estates rarely amounted to one hundred and fifty pounds. The tenure was mostly freehold, though mention is made of "some few" copyholders. It was thought that the yeomanry were on the increase rather than on the decline. Some large properties had recently been sold in parcels without an equal tendency on the part of large proprietors to increase the size of their estates.⁵⁵ Marshall gives a more detailed view of that part of the North Riding known as the Vale of Pickering, which contains about two hundred thousand acres. The land of the Vale was largely in the hands of small owners. There was only one large estate in the district. In speaking of the township of Pickering, Marshall says, "It contains about three hundred freeholders, principally occupying their own small estates; many of which have fallen down, by lineal descent, from the original purchasers. No great man, nor scarcely an esquire, has yet been able to get a footing in the parish; or if any one has, the custom of portioning younger sons and daughters by a division of lands, has reduced to its original atoms the estate which may have been accumulated. At present no man is owner of three hundred pounds a year landed estate lying within the township."⁵⁶ Most of the Vale of Pickering had been enclosed, before 1788, without reducing the number of small proprietors. "During the century," says Marshall in speaking of the township of Pickering, "the common fields and common meadows have been gradually contracting by amicable exchanges and transfers and are now in a manner wholly inclosed."⁵⁷

"A considerable part" of the West Riding of Yorkshire was possessed by small proprietors who were very commonly free-

⁵⁵ J. Tuke: *Agriculture of the N. Riding of Yorkshire*, Chap. II., Sec. I.

⁵⁶ Marshall: *Rural Economy of Yorkshire*, Vol. I., pp. 19, 20.

⁵⁷ *Ibid.*, p. 52.

holders, yet the number of copyholders was also "considerable." These small proprietors generally occupied their own lands and were said to manage and cultivate their farms in an attractive manner.⁵⁸ Contrary to what might be expected from what has been said of the districts about Manchester, it was thought that the presence of manufactures in the West Riding of Yorkshire had drawn capital away from agriculture which might otherwise have been invested in estates, and this, it was thought, accounted for the large number of small proprietors.⁵⁹

Lincolnshire showed both extremes in the size of estates. The whole of the northwestern portion of the county was owned by half a dozen persons. Nearly all the land along the Humber and the Trent, from Ferriby Sluice to Gunhouse, inclusive, a distance of nearly twenty miles, belonged to three persons. But, in the southern part of the county small proprietors were very numerous. The parish of Kinton, with an area of five thousand acres, contained one hundred and forty-six proprietors. One hundred and eighteen proprietors owned two-thirds of the parish of Barton. In the southeastern corner of Lincolnshire, in what was called South Holland, small proprietors had been increasing in numbers; a fifth part of the district was occupied by small freeholders.⁶⁰ Half of the occupiers in the "Fen parishes" were freeholders. Freeholds were numerous in the hundred of Shirbeck. In the parish of Frieston, containing above three thousand acres, there was not one plot of more than sixty acres. The Isle of Axholme was at that time, as more recently, noted for its small proprietors. Most of the district was said to resemble some rich parts of France and Flanders. The inhabitants were collected together in villages or hamlets. Almost every house was inhabited by a farmer who owned a small farm. The farms varied in size from five to forty acres. The land was uncommonly fertile, and these small proprietors cultivated it with the greatest care; so that a farm of twenty acres could be said to "support a family

⁵⁸R. Brown: *Agriculture of the West Riding of Yorkshire*, Chap. II., Secs. I., II.

⁵⁹*Ibid.*, Chap. IV., Sec. I.

⁶⁰While the word freehold is often used in the discussions concerning these districts, Young states in another connection that there was "much copyhold" in the low country. The writer has taken care to use freehold where the reports contain the word, and in all other cases to express the idea of ownership, which includes copyhold, in some other way.

very well." These families were "very poor respecting money," says Young, but they were "very happy respecting their mode of existence." To quote Young further regarding these small proprietors, "They are passionately fond of buying a bit of land. Though I have said they are happy, yet I should note that it was remarked to me, that the little proprietors work like Negroes, and do not live so well as the inhabitants of the poorhouse; but all is made amends for by possessing land." While these very small proprietors were so prevalent in the Isle of Axholm, the district about Louth afforded landowning farmers of a very different type. Men who owned estates which would rent for seven hundred pounds a year, remained farmers and kept entirely to the manners and appearances of the other farmers. These large yeomen farmers were "Thriving, independent, and wealthy," says Young, "and in consequence of all, as happy as their personal merit, their moral virtue, and dependence on, and attention to their religious duties permit them to be."⁶¹

In Nottingham there were "Some considerable, as well as inferior yeomen, occupying their own lands." Their tenures were "freehold, copyhold and leasehold." There were "many leaseholds for three lives absolute (or freehold leases) holden under the archbishop of York, or the Church of Southwell."⁶²

The whole midland district, including the counties of Leicester, Rutland, and Warwick, with the northern margin of Northamptonshire, the eastern portion of Staffordshire, and the southern extremities of Derbyshire and Nottinghamshire, is described by Marshall as abounding in yeomen of the highest class. Men cultivating their own estates, worth from two to five hundred pounds a year, were thickly scattered over almost every part of the district. One instance is given of a man whose estate was worth two thousand pounds a year, who cultivated his own land and lived as a yeoman.⁶³ While the County of Northampton contained a considerable number of yeomen occupying their own estates,⁶⁴ it was also "remarkably full" of large proprietors.⁶⁵ In Staffordshire there were gentlemen of large and of small fortunes

⁶¹ Young: *Agriculture of Lincoln*, Chapter II.

⁶² R. Lowe: *Agriculture of Nottingham*, Chapter II: Sections I and II.

⁶³ Marshall: *Rural Economy of the Midland Counties*, p. 13.

⁶⁴ W. Pitt: *Agriculture of Northampton*, Chap. II., Sec. I.

⁶⁵ Young: *Annals*, Vol. VI., p. 465.

occupying their own estates.⁶⁶ The land throughout the midland counties was generally held in fee, but occasional instances of copyholds and leaseholds are given.

There was "an infinite number" of freeholders and copyholders in Shropshire who occupied their own estates "of all inferior sizes." Men who had become wealthy in manufactures or commerce were forming large estates by concentrating the estates of others. But on the other hand men of hereditary fortune were being forced to alienate their domains which were often divided and sold to thrifty farmers.⁶⁷

Herefordshire afforded a few estates varying from four hundred to one thousand pounds a year, which were occupied by their owners, who cultivated and managed their estates in the best style and who were introducing the new agriculture. But there were "a few only" of this class at the close of the eighteenth century. Formerly they were "much more numerous."⁶⁸

A large portion" of Monmouthshire was owned by two great proprietors. Besides these were proprietors with incomes from one to three thousand pounds, and a third class with incomes from three hundred to one thousand pounds a year. These proprietors generally occupied considerable tracts of land, and many of them were at great expense in improving their soil. There were a few smaller landowners to be found in some parts of the county, some of whom were better and some worse than "the general mass of [tenant] farmers."

The landed property of Worcestershire was diffused into the hands of the various classes. Land was often upon sale and became the property of those who had acquired the money with which to purchase it, either by inheritance, by trade, or by agriculture. The number of "gentlemen" occupying land was on the increase, and perhaps Worcestershire should be counted with those parts of the country where the yeomanry were being replaced by gentlemen farmers.⁶⁹ The small farmers were suffering from lack of capital. The large and opulent farmers were introducing new methods in agriculture. They were learning

⁶⁶W. Pitt: Agriculture of Staffordshire, Chap. II., Sec. II.

⁶⁷J. Plymley: Agriculture of Shropshire, Chap. II., Secs. I and II., and Chap. IV., Sec. I.

⁶⁸J. Duncumb: Agriculture of Hereford, Chap. II., Secs. I and II.

⁶⁹W. Pitt: Agriculture of Worcestershire, Chap. II., Secs. I. and II.

also to profit by the great fluctuations in prices, peculiarly characteristic of the war period, by holding their produce for the very highest prices.⁷⁰

Yeomen were numerous in Gloucestershire. Marshall tells us that the Vale of Gloucester contained no large estates. Several noblemen had "off estates" there, but none of them were extensive. The remainder of the vale belonged principally to resident gentlemen, and to "a pretty numerous yeomanry."⁷¹ Landed property was in a few hands in the Cotswold Hills, and the number of yeomen was inconsiderable.⁷² There was a "considerable yeomanry" in the Vale of Berkeley, but most of the Vale was owned by great landlords.⁷³ A contested election in 1776 gives evidence of 5,790 freeholders in Gloucestershire, and it was thought that the number had increased by the end of the century. But the election records for 1811 give only 5,757 freeholders, which shows a decline rather than an increase in this class.⁷⁴ Mr. Rudge interprets the presence of so many freeholders to mean that the number of yeomen who possessed freeholds of various values, was great.⁷⁵ While this conclusion is doubtless correct, a glance at the pages of these reports shows that by no means all of the "freeholders" were owners of farm land, and not all of the owners of farmland resided upon their land, and not all who resided upon their land were yeomen. It is so much dependent on the significance of these figures as of most other countries, by copying result from the first few of which there are very few in Kent." which covers 98 pages in the number of yeomen were on the increase holders are recorded, gently divided and sold to occupiers.⁸² In they were owners of stone there were occupiers of land of every 388 owners of farm fortune, yeomen, husbandmen, and tradesmen." owned and occupied Kent had long been proverbial for their wealth owned, and may only a part of blessed with health, and as for wealth, quires. or greater fortune's kind embraces,

⁷⁰ Ibid., Chap. IV., Sec. I. "an grey shall oft outweigh

⁷¹ W. Marshall: Rural Econ. other places."

⁷² Ibid., Vol. II., p. 12.

⁷³ Ibid., Vol. II., p. 89. Essex, Vol. I., Chap. II., Sec. I.

⁷⁴ The Poll at the Election of a 1st Chap. II., Sec. I.

ter.

⁷⁵ Agriculture of Gloucestershire, Chap. I., p. 53.

ture of Kent in J. R. A. S. E., Series III.;
of Proverbs and Old Sayings which are

In the report upon Essex,⁸⁰ Howett is quoted as saying, "Perhaps there never was a greater proportion of small and moderate sized farms, the property of mere farmers, than at present. Such has been the flourishing state of agriculture for twenty or thirty years past, that scarcely an estate is sold, if divided into lots of forty or fifty to two or three hundred a year, but is purchased by farmers, who can certainly afford to give for them more than almost any other persons, as they turn them to the highest advantage by their own cultivation; and hence arises a fair prospect of landed property gradually returning to a situation of similar possession to what it was a hundred, or a hundred and fifty years ago, when our inferior gentry resided upon their estates in the country, and, by their generous hospitality, diffused comfort and cheerfulness around them. Nor let us envy or grudge the farmers this prosperity; by their laborious and spirited exertion, they highly deserve it."

The landed property of Kent was very much divided, there being few extensive possessions which were not intersected by other persons' property. "This distribution of freeholds," says Hasted,⁸¹ "cements a good understanding between the gentry and yeomanry. Their lands being everywhere so much intermixed one with another, obliges them to a mutual civility for their own interest and convenience; nor are the latter so much dependent on the gentry as the inhabitants of most other countries, by copyhold or customary tenures of which there are very few in Kent." It was thought that the number of yeoman were on the increase as estates were frequently divided and sold to occupiers.⁸² In the district of Maidstone there were occupiers of land of every order—"men of fortune, yeomen, husbandmen, and tradesmen." The yeomenry of Kent had long been proverbial for their wealth and prosperity.⁸³

All blessed with health, and as for wealth,
By fortune's kind embraces,
A yeoman grey shall oft outweigh
A knight in other places.⁸⁴

⁸⁰ Young, A.: *Agriculture of Essex*, Vol. I., Chap. II., Sec. I.

⁸¹ J. Boys: *Agriculture of Kent*, Chap. II., Sec. I.

⁸² Boys, *Ibid.*

⁸³ Marshall: *Southern Counties*, Vol. I., p. 53.

⁸⁴ Quoted in C. Whitehead, in *Agriculture of Kent* in J. R. A. S. E., Series III.; Vol. X., part III., 1889, from *A Collection of Proverbs and Old Sayings which are either used in or relate to Kent*, by S. Pegge.

"Out of the law of Gavelkind," says Marshall, "this valuable order of men have principally risen. And seeing the present flourishing state of their country after seven hundred years of experience, the wisdom of that law appears in a strong light."⁸⁵ A contested election in 1790 registered 6,543 freeholders living within Kent and 436 living outside of the county. The vast majority, perhaps 80 or 90 per cent., of the freeholders were owners of agricultural land. And a glance at the columns shows a very large percentage, perhaps one-half, of these owners of land to be the sole occupiers of their estates.⁸⁶

Sussex was cultivated principally by tenant farmers. There were, however, a scattering few yeomen in the "Weald" and along the sea coast.⁸⁷

In Hampshire "the great bulk" of the land was "held and cultivated . . . by yeomanry, occupying their freehold, copyhold, or leasehold possessions." Some of these farms were supposed to have formerly composed a part of the demesne lands of the see of Winchester, but at that time they were granted by the Bishop as freeholds for three lives. They were generally renewed to the families in possession for many successive generations. The fine on renewal varied, from one and a half to two years' improved rent, valued by competent persons in the vicinity.⁸⁸

In speaking of Wiltshire at this time,⁸⁹ Davis says, "The greater part of this county was formerly, and at no very remote period, possessed by large proprietors. Almost every manor had its resident lord, who held part of the lands in demesne, and granted out the rest by copy or lease to under-tenants, usually for the term of three lives renewable. A state of commonage, and particularly of open common field, was peculiarly favorable to this tenure. Enclosures naturally tend to its extinction. The northwest part of Wiltshire, being much better adapted to enclosures and to sub-divisions of property than the South, was first enclosed; the southeast, or down districts, . . . has undergone few enclosures, and fewer sub-divisions; and whilst a great

⁸⁵ Southern Counties, Vol. I., p. 53.

⁸⁶ Kent: Poll for Knights of the Shire.

⁸⁷ Marshall: Southern Cos., Vol. II., pp. 104, 171, 233.

⁸⁸ C. Vancouver: Agriculture of Hampshire, Chap. II., Sec. I.

⁸⁹ Agriculture of Wiltshire, P. XIII.

deal of the property of the former district has been divided and sub-divided, and gone into the hands of the many, the property in the latter district has been bought up by the great landholders, and is now in fewer hands than it was in the seventeenth century. . . . Generally speaking, it may be said that a considerable [proportion] of the North-west District is possessed by small proprietors, and that by far the greater part of the South-east District is the property of wealthy landholders."

Somersetshire contained many estates which were worth from two to six thousand pounds per annum, but the "greater part of the county" was owned by the middle class, holding lands worth from fifty to five hundred pounds a year. A part of the land was leased out on lives, a part was let out for short terms, and no small quantity was the fee of the occupiers, who constituted "a most respectable yeomanry."⁹⁰

Estates in Dorsetshire were generally large in comparison with those of most other counties.⁹¹ The western part of the county contained most of the yeomanry. The inhabitants of Portland were almost all freeholders.⁹²

Life leaseholds were common in Dorsetshire. Stevenson records the conditions of an expired lease in which the term was dependent upon the lives of the farmer and his two sons; but was to terminate in ninety-nine years, even if all three had not yet died. The various payments to which the tenant was subject were as follows: Heriot, five pounds; fine, two hundred and eighty pounds; yearly rent, two pounds four shillings and four pence; a capon or one shilling; a harvest journey or six pence; a plow journey or two shillings and six pence.⁹³

In Devonshire there were a few large estates. "No inconsiderable part of the whole county" belonged to the sees of Exeter, York, and Salisbury, the Dean and Chapter of Windsor, the Universities, and the Duchy of Cornwall. Yet a "large proportion" of the county was owned and occupied by small proprietors.⁹⁴ However, these small proprietors did not as a rule hold their land

⁹⁰J. Billingsley: *Agriculture of Somersetshire*, Chap. II.

⁹¹Stevenson: *Agriculture of Dorsetshire*, Chap. II., Sec. I.

⁹²The lands here were equally divided among all the sons upon the death of the father, according to the custom of *Gavelkind*. See Stevenson, J. B., Chap. II., Sec. I.

⁹³*Agriculture of Dorsetshire*, Chap. II., Sec. II.

⁹⁴Vancouver: *Agriculture of Devonshire*, Chap. II., Sec. I.

in fee; life leaseholds were more common with this class of farmers. In speaking of the western part of Devonshire, Marshall said, "Landed property puts on an appearance, here, very different from that which it wears in other parts of the kingdom. The fee-simple is principally in the possession of men of large property. But instead of *letting* out their lands to tenants, at an annual rent equivalent to their value, they are *sold* in small parcels or farms, generally for *three lives* named by the purchaser, or ninety-nine years, provided any one of the parties, named, survives that period; reserving, however, a small annual rent, together with heriot or other forfeiture, on the death of each nominee, similar to those attached to copyhold tenure which this species of tenancy, *or* tenure, very much resembles; it being usual to put in fresh lives as the preceding ones drop off, receiving a fine or adequate purchase for the addition of a fresh life, or lives. This state of landed property which is common in the west of England forms one of the many striking features, which Rural Economy at present exhibits in this part of the Island."⁹⁵

Vancouver did not favor this form of land tenure. "Lifehold tenures," said he, "are more injurious and extensive than is generally apprehended. The same capital employed in the purchase of a lease for ninety-nine years, determinable on three lives, applied to the stocking, cultivating, and improving a more extensive occupation held at a fair annual rent, and under an encouraging term of years, must produce, in the contemplation of such property, very different emotions in the mind of the owner; to the occupier results are infinitely more advantageous; and to the public at large a more abundant supply is produced than can possibly be derived from a capital employed in the purchase of a more narrowed occupation on an eventually undisturbed possession of 99 years. . . . Fortunately for the future improvement and prosperity of the country, this species of tenure is becoming much lessened within the last twenty years."⁹⁶

Mr. G. B. Morgan speaks of "The practical respectable yeomanry" in Cornwall and does not indicate how numerous they were. But says "Property is very much divided. . . . The size of estates varies greatly, perhaps from twenty to five hundred

⁹⁵ Marshall: Rural Economy of the West of England, Vol. I., p. 43.

⁹⁶ Ibid., Chap. II., Sec. II.

acres, very few exceeding four hundred pounds per annum. Many gentlemen and clergymen in this county occupy their own estates, and glebes; and keep their grounds in a very superior state of cultivation. . . . As to the tenure of lands it has been much the custom of the country to grant leases for lives to the tenants, for a term of ninety-nine years, determinable on the death of the longest liver of three lives, to be named by the taker. Upon the death of one of the lives named in the lease, it was usual for the landlord to consent to the adding a new life to the two remaining. The consideration in the original grant was uniformly a fine paid in hand of from fourteen to eighteen years rent of the estates, with a small reserved, or conventional rent, and suit and services in the manor court; the renewal generally a fine only of three years rent, for one life, or seven for two lives. . . . There is a very considerable proportion of the lands of Cornwall now held by the tenantry under these leases; but it is certain, that the number of new grants, or renewal of old ones, is on the decrease; and seldom take place, except under some peculiar circumstances affecting the particular estate, or from some particular motive, arising from the situation of the proprietor. The tenants under these leases (called leasehold, or fine leases) are always subject to the taxes, and repairs of every description . . . Under the property tax they are rated both as proprietor and occupier."⁹⁷

In speaking of the advantages and disadvantages of the life leases of the west of England Marshall said, "Unfortunately for the purchaser and his family, as well as for the community, he has laid out his whole on the purchase, and has not a shilling left for improvements; nay, has perhaps borrowed part of the purchase money; and has thus entailed on himself and his family lives of poverty and hard labor. Whereas, had he expended the same money in stocking and improving a rented farm, he might have enriched his family, and have thrown into the markets a much greater proportionate quantity of produce." After naming many other disadvantages of leases on lives and condemning especially the speculations which they involved, Marshall continues, "These disagreeable circumstances have induced several men

⁹⁷ *Agriculture of Cornwall*, Chap. II., Sec. I.

of property to suffer the life leases of their estates to drop in; and, afterwards, to let their lands for an annual rent."⁹⁸

With all the objections to life leaseholds, Billingsly considered them much better investments than freeholds,⁹⁹ and Anderson was at the same time discoursing upon the bad consequences of a farmer's lessening his capital by the purchase of land.¹⁰⁰

Thus, when the evidence is brought together for the various parts of England it is found that enclosures, and the desire to be farmers on a large scale had led to a decline in landownership on the part of farmers in some places; and that in others the high prices due to the presence of the many purchasers who had made fortunes in manufactures or commerce had wrought the same result; but, that taking England as a whole, there still remained a large class of landowning farmers which was often and in many places increased by new purchases of land. Yet one form of freehold, life leasehold, was on the decline and this was doubtless the most prevalent form of landownership on the part of farmers in the Southwest. If the question were asked, "Were there as many landowning farmers in England in 1800 as in 1688?" it would be impossible to answer the question; but it can be said that while here and there counties showed a marked change, taking England as a whole, the decline had doubtless been relatively small.

⁹⁸ West of England, Vol. I., p. 45.

⁹⁹ Hunter's *Georgical Essays*, Vol. VI., Essay V.

¹⁰⁰ *Ibid.*, Vol. VI., Essay XII., Sec. 45. See note.

CHAPTER IV.

THE AGRICULTURAL DEPRESSION FROM 1820 TO 1836, AND ITS
INFLUENCE UPON LANDOWNERSHIP.

The first twelve years of the nineteenth century were extremely prosperous times for English agriculture, and until 1820 prices had not been reduced very materially;¹ but from 1820 to 1836

¹Tooke, *History of Prices*, Vol. I., p. 5. Also, *The Report of the Select Committee on Agriculture*, for the year 1833, p. xli, from which the following table is taken :

The price of wheat, per quarter, from 1797 to 1833.

ANNUAL AVERAGE OF THE KINGDOM.		5 YEAR AVERAGES	HIGHEST AND LOWEST PRICES IN THE 5 YEARS.	
Years	Average S. d.	S. d.	Date of highest price.	Date of lowest price.
1797.....	52-2	79-1	21, March, 1801. 154 S. 1 d.	25, March, 1797. 47 S. 11 d.
1798.....	50-4			
1799.....	66-11			
1800.....	110-5			
1801.....	115-11	69-9	17, August, 1805. 97 S. 8 d.	3, March, 1804. 49 S.
1802.....	67-9			
1803.....	57-1			
1804.....	60-5			
1805.....	87-1	88-5	9, June, 1810. 114 S. 10 d.	14, November, 1807. 65 S. 7 d.
1806.....	76-9			
1807.....	75-1			
1808.....	78-11			
1809.....	94-5	83-2	8, August, 1812. 130 S. 3 d.	13, January, 1816. 53 S. 1 d.
1810.....	103-3			
1811.....	92-5			
1812.....	122-8			
1813.....	106-6	74-	23, June, 1817. 112 S. 7 d.	29, December, 1821. 46 S. 2 d.
1814.....	72-1			
1815.....	63-8			
1816.....	76-2			
1817.....	94-	58-1	23, June, 1825. 60 S. 5 d.	26, October, 1822. 38 S. 1 d.
1818.....	83-8			
1819.....	72-3			
1820.....	65-10			
1821.....	54-5	61-8	14, November, 1828. 76 S. 7 d.	19, October, 1832. 51, S. 3 d.
1822.....	43-3			
1823.....	51-9			
1824.....	62-			
1825.....	66-6	53-1		
1826.....	56-11			
1827.....	56-9			
1828.....	60-5			
1829.....	66-3			
1830.....	64-3			
1831.....	66-4			
1832.....	58-8			
1833.....	53-1			

prices were comparatively low. This era of low prices, following the great prosperity of war times, wrought disaster among all classes in England who were dependent upon agriculture for an income. Tooke attributes the high prices of the one period and the low prices of the other to the war, the currency, and the variations of the seasons, along with a rapidly growing population engaged in manufactures and commerce. The war made the importation of food dangerous and expensive and a somewhat debased currency, and bad seasons at the close of the century, with an increasing demand for food resulted in enormously high prices. On the other hand, peace, a restored currency and a series of excellent crops after 1819 resulted in a great reduction in prices.

The purpose of this chapter is to determine the influence of this agricultural depression upon the landowning farmers of England.

We are fortunate in having the minutes of the evidence given before the Select Committee on Agriculture, during this period, which evidence gives a clear account of the effect of the depression in this respect.

There still existed large numbers of landowning farmers in the various parts of England in 1833.² Many of these men held estates which had been handed down from father to son for many generations,³ while large numbers had purchased the land they occupied.⁴ But these yeomen farmers were hard pressed and many had sold their land before 1833. When we go carefully through the minutes of evidence given before the committee we are especially impressed with the rapid decrease in the number of landowning farmers, which had taken place after the war, and before 1833. In Cumberland and Westmoreland the number had "considerably diminished."⁵ Up to the war properties had continued long in the same families,⁶ but in 1833, Mr. Blamire said he believed that since 1815 a greater change had taken place in the

²Parliamentary Papers, 1833, Vol. V., questions 6605, 2346, 5819, 5820, 412, 413, 414, 415, 8474, 1691, 2413, 2196, 2202, 7375, 6405, 9486, 8823, 1262, *9196.

³Parliamentary Papers, 1833, Vol. V., questions 1702, 6061, 416, 1696, 2420, 9930.

⁴Ibid., questions 3105, 3106, 12, 216, 7902, 5820, 416, 532, 2197, 9928, 4862-4866; Parl. Papers, 1836, Vol. VIII., questions 1192, 1268-9.

⁵Parl. Papers, 1833, Vol. V., question 6697.

⁶Ibid., question 6958.

proprietorship of the small farms than in any antecedent period of much longer duration.⁷ In 1837, Blamire was again before the Committee, and says: "The condition [of the landowning farmers in Cumberland] is generally speaking most pitiable. At the present moment they are as a body, in fact, ceasing to exist at all."⁸ Mr. Merry, the owner and occupier of a three-hundred acre farm in the North Riding of Yorkshire stated that in the different dales in the district where he lived the farmers had nearly all been "Ancient freeholders;" but the number of such farmers had been "regularly lessening for ten years," during which time they had been reduced about a seventh.⁹ From Mr. W. Simpson we learn that the landowning farmers were "nearly all gone" near Doncaster, Yorkshire.¹⁰ In Nottinghamshire there were "comparatively very few remaining."¹¹ In Leicestershire, Northumberland, and the Midland Counties, generally, small proprietors farming their own land were numerous but "a great many of them" had been ruined.¹² In Shropshire and in Cheshire the number of "small landed proprietors" had "greatly diminished, . . . since the year 1800."¹³ In Herefordshire there were still a great many yeomen but fewer than twenty years earlier.¹⁴ In Worcestershire a good many freeholders, who farmed their own lands, had sold out.¹⁵ In Kent, near Rochester, no great number had gone to the wall, but they were poor, many of them living little better than workingmen.¹⁶ Such farmers were yet numerous in Hampshire and West Sussex but many had been compelled to sell their estates¹⁷ and those who remained were "much reduced in point of circumstances." In Wiltshire the number of landowning farmers had diminished "most materially" within the last fifteen years.¹⁸ In Somersetshire land

⁷Ibid., question 6701.

⁸Parliamentary Papers, 1837, Vol. V., question 5107.

⁹Parliamentary Papers, 1833, Vol. V., questions 2439, 2533.

¹⁰Ibid., question 3105.

¹¹Ibid., S. Wooley, questions 12, 216.

¹²Ibid., Buckley, questions 8574, 8579, 8581, 8587.

¹³Ibid., Lee, questions 5825, 6153.

¹⁴Ibid., question 8475.

¹⁵Ibid., question 1697.

¹⁶Ibid., questions 6405-6413.

¹⁷Ibid., questions 9923-9924, and 9926.

¹⁸Ibid., question 1262.

had been changing hands a great deal since the war, and the number of farmers who bought land was not so great as the number of those who had sold.¹⁹ It was the custom there for the landlords to "run out" the life leases and not make any new ones.²⁰ Thus all the evidence points to the conclusion that an unusually rapid decline of the yeomanry had taken place during the period of the agricultural depression which followed the close of the Napoleonic wars. We shall now investigate somewhat in detail the causes of this unusually rapid decline.

Extravagance, living beyond one's income, often leads to bankruptcy in all lines of business, and it would be strange, indeed, if this were not, occasionally, the cause which compels farmers to sell their estates. From Norden we learn that in 1607 this was sometimes the cause of failure on the part of landowning farmers in England.²¹ In 1833, a great many of the yeomen of Cheshire were living beyond their means. During the period of high prices they had accustomed themselves to a standard of living which they were unable to maintain after prices had fallen, without gradually consuming their estates. Lee says of this class "Their property is nearly gone."²² There is a suggestion that a change of this kind in the habits of the yeomen farmers may have been the occasion of forced sales of land in Worcestershire²³ and in Somersetshire.²⁴

But while extravagance may at times have been the cause of failure, the yeomen as a class were industrious and frugal.²⁵ Speaking of the yeomanry of Cumberland, Blamire says, they "are quite as frugal as the tenantry and often more so, and their situation is often worse. . . . They equally lodge their labourers in their own houses, and dine at the same table with them."²⁶ Having to give up their estates was "by no means the effect of improvidence on their part."²⁷ Mr. W. Thurnall said

¹⁹Ibid., questions 9208-9209.

²⁰Ibid., questions 4970-4974.

²¹Surveyors' Dialogue, Edition of 1618, p. 81 *et seq.*

²²Parliamentary Papers, 1833, Vol. V., questions 5816-5817.

²³Ibid., question 1700.

²⁴Ibid., question 9206.

²⁵Ibid., question 1704, question 8585.

²⁶Ibid., questions 6705-6706.

²⁷Parliamentary Papers, 1837, Vol. V., question 5111.

that in Cambridgeshire the yeomen were very economical and always hard-working men.²⁸ "There is not a more industrious man in the three counties," says J. B. Turner, "than a man in Herefordshire whose estate has been sold under bankruptcy."²⁹

It was not, as a rule, lack of frugality and industry which ruined so many of the yeomanry during this period of depression; it was primarily the fall in prices at a time when indebtedness was very prevalent with this class.³⁰ This indebtedness was sometimes incurred for the purpose of purchasing land, sometimes for improvements, often to provide for the younger members of the family, and, occasionally, to cover general living expenses.

Mr. W. Simpson told the Committee of 1833 that the yeomanry near Doncaster were "many of them bankrupts." "Farmers who, having four or five thousand pounds, bought farms twenty-five or thirty years ago, borrowing part of the purchase money, have been obliged to sell, and they have nothing left."³¹ In Nottinghamshire "a great number bought land at high prices, and having mortgaged their farms for more than their value at the reduced prices, they have been almost universally ruined."³² This class of farmers met with the same misfortune in Lincolnshire.³³ In Cheshire, "A great many farmers got a considerable sum of money, and were mad to lay it out in land. They purchased land at forty years' purchase, in some instances, and borrowed probably half the money," and soon after, the produce sold for so much less than formerly that they could not pay the interest on the money they had borrowed and were "obliged to sell their properties for what they could get."³⁴ In Shropshire, again, farmers paid high prices for land and "borrowed money, as much as they could sell the property for afterwards."³⁵ These same

²⁸ *Ibid.*, 1836, Vol. VIII., question 2423.

²⁹ *Ibid.*, 1833, Vol. V., question 8477.

³⁰ *Parliamentary Papers*, 1833, Vol. V., questions 6707, *et seq.* 2346, 6063, 532, 598, 1701, 4401, 4402, 9935, 9206, also Vol. VIII., for 1836, questions 11310; Vol. V., for 1837, question 5108.

³¹ *Ibid.*, 1833, Vol. V., question 3102-8.

³² *Ibid.*, question 12216, question 12219.

³³ *Ibid.*, question 7903.

³⁴ *Parliamentary Papers*, 1833, Vol. V., question 5820.

³⁵ *Ibid.*, question 532.

stories are repeated for Norfolk,³⁶ Hampshire,³⁷ Somersetshire,³⁸ Berkshire and Buckinghamshire.³⁹

Improvements do not appear to have been very generally the occasion of indebtedness, but in some instances the witnesses before the Select Committee gave this as an important cause.⁴⁰

The provision for younger children, or the paying off of the other heirs when one member of the family took the estate, was often the occasion of heavy indebtedness. In Cumberland, the "Statesmen" had large families and "from a miscalculation of their real situation" they left their children "larger fortunes than they ought to have done, and saddled the oldest son with the payment of a sum of money which it was impossible for him to pay."^{41 42} This is given as an important cause of indebtedness in Nottinghamshire,⁴³ Somersetshire,⁴⁴ Berkshire and Buckinghamshire.⁴⁵

Thus it would seem that in 1833 these small estates were very generally incumbered. The indebtedness had been incurred during the period of high prices; and when prices fell the debt was often equal to, if not greater than, the value of the land. The whole net product would not, in many cases, pay the interest. Where this did not force the yeomen to give up their estates at once, the land usually came into the market at the death of the

³⁶ Ibid., question 2197.

³⁷ Ibid., question 9928.

³⁸ Ibid., questions 4862-4866.

³⁹ Parliamentary Papers for 1836, Vol. VIII., question 1192, question 1268.

⁴⁰ Parliamentary Papers, 1833, Vol. V. Commencing with 5816, Lee, Cheshire, the minutes read: "If a yeoman, tempted by high prices of the war, had borrowed money to improve his little property, what would be the condition of that man with the prices falling, the debt remaining and his own habits remaining the same?" The witness replies, "Entire ruin." Again, with Buckley from the Midland Counties as witness, the minutes, 8582 *et seq.*, read as follows: "From your own knowledge, were not many of these small proprietors tempted during the war to borrow money to improve their lands? No doubt about that . . . Those parties, without any fault of their own, have been by this debt, contracted for the improvement of their estates, worked out of their estates? Completely so, without the least fault of their own . . . I know many who have been . . . ruined" in this way.

⁴¹ This system seems comparable to *Anerbrecht* in Germany.

⁴² Parliamentary Papers, 1833, Vol. V., question 1704; 1837, Vol. V., question 5107.

⁴³ Ibid., 1833, Vol. V., question 12216 to question 12219.

⁴⁴ Ibid., question 9198.

⁴⁵ Ibid., 1836, Vol. VIII., question 1192, *et seq.*

owner, as no member of the family cared, as a rule, to take up the burden of mortgaged ownership which had come to be looked upon as less desirable than tenancy.⁴⁶ This fall of prices at a time when mortgages were very prevalent was the immediate cause of the rapid decline in landownership on the part of farmers during the twenties, thirties and forties of the nineteenth century.

When this land came upon the market it was usually purchased by greater landlords, merchants, or manufacturers,⁴⁷ who very rarely cared to put it upon the market again; and thus the results

⁴⁶It is a common saying in England that "The landlord is worse than the landlord."

⁴⁷Parliamentary Papers, 1833, Vol. V., question 6699, "As these small estates [in the northern counties] are brought to market do small proprietors step in and buy them, or are they absorbed into large properties? Frequently absorbed into large properties, but occasionally bought by men who have realized money in trade or in large farms, and who are withdrawing their capital and . . . and investing it in the purchase of landed property." In Kent, question 6412, these small estates are "generally bought by some one who has an estate adjoining."

Question 2348. "As those small proprietors [in the North Riding of Yorkshire] have sold out, who have become the purchasers? In some measure large proprietors that were adjoining, but chiefly tradesmen and shipowners from Scarborough . . . There is none of it sold to ancient freeholders, it has changed hands completely, and gone to people who are strangers to the neighborhood." In Cheshire, question 6157, these small properties were "absorbed into larger estates or [purchased] by large manufacturers, who have laid out a good deal of money." Again in Wiltshire, question 1270, "They are generally bought by gentlemen who have adjoining estates; there are very few estates now purchased by the yeomanry for occupation." Question 7379, "When they [the small freeholds in Kent, Surrey and Essex] have been sold, by whom have they been bought? I think by persons in trade in the towns, and so on." Question 9208, "Sometimes the yeomen's estates [in Somersetshire] have been bought by other small proprietors, and sometimes by gentlemen of large landed properties." Question 1703, "Who generally bought those estates [in Worcestershire] so sold? Gentlemen in the neighborhood, principally for investment." Question 1704, "Not small capitalists? No, they have never purchased since those high times in 1811 and 1812." Question 2534, "In former years when a freehold was sold there was another freeholder at hand to purchase the property, but now they have to get a purchaser from . . . some trading place." Question 8580, "A great deal has been bought in the Midland Counties by manufacturers; some have been purchased for accommodation by adjoining proprietors, but generally by manufacturers or the great landed proprietors."

A statement made by Mr. Doyle on this subject, in his report to the Royal Commission on Agriculture (Parliamentary Papers, 1881, C.—2778—II.) illustrates the tendency, with respect to the class who were most eager to buy the small estates when they came upon the market, which is in many cases suggested, but for which positive proof seems hard to bring together, yet which most people are ready to admit as the truth. The quotation reads: "Although land yields a return comparatively so inadequate, it is always bound to be in favor as an investment for the ambition and accumulated savings of trade and manufacture. Nor do any class of owners appear to be more eager than are the 'new men' to add acre to acre, or more bent on doing so at any cost." p. 260.

of this temporary depression have been more permanent than we should expect in a country where land ownership on a large scale does not involve so many social advantages, and where systems of primogeniture and entail do not bind the large estates together permanently.

The yeomen farmers were gradually reduced in number,⁴⁸ decade after decade, until by the close of the third quarter of the century they were found only here and there; and tenancy was the rule.⁴⁹ In 1883 John Rae estimated that probably not

⁴⁸Lavergne: *Rural Economy of England*, 1855, pp. 113-4. "Formerly there were many small proprietors in England who formed an important class in the state, they were called yeomen, to distinguish them from the landed gentry, who were called squires. These yeomen have almost disappeared but not by any violent revolution. The change has taken place voluntarily and imperceptibly. They have sold their small properties to become farmers, because they found it more profitable; and most of them have succeeded, those remaining will most likely shortly follow the example."

⁴⁹James Caird: *General View of British Agriculture*, J. R. A. S. E. [1878], second series, Vol. XIV., Part II., p. 32. "The land of the United Kingdom may be said to be now [1878] almost wholly cultivated by tenant-farmers. The class of yeomen, or small landowners farming their own land, is found here and there in England, but scarcely at all in Scotland, and now bears but small proportion to the whole. Many of the large landowners retain a farm under their own management for home supplies, or for the breeding of selected stock; very few as a matter of business or profit."

A few quotations from the Report of the Royal Commission on Agriculture, as found in the parliamentary papers for the years 1881 and 1882, amplify this statement of Caird's.

"My report," says Mr. Coleman, in speaking of Yorkshire, "is noticeably deficient in any information as to the status and prospect of peasant proprietors, because this class does not exist in Yorkshire; the nearest approach to them is to be found in small freeholders far up the dells, whose position, as far as I could learn, was in many cases a shade worse than occupiers of small holdings." (Parliamentary Papers, 1881, C.—2778.—II., p. 176.)

In his report on Lincolnshire, Mr. Druce says, "There are large numbers . . . of small freeholders in the Isle of Axholme . . . Here the small freeholders appear to have existed for many years. (Parliamentary Papers, 1881, C.—2778.—II., p. 384.) "In the eastern-central, and southern, and eastern parts of the county small freeholders are also numerous. They are to be found south of Boston, in South Holland, notably in Kirton and some other villages in that locality; again west of Boston in Wildmore Fen, and the West Fen, and north of Boston, running quite up to the Humber at a little distance from the sea coast, but not on it, there are also large numbers of them." (Ibid., p. 385.)

In Durham many of the small estates had been absorbed by the large ones. "The yeomen are passing away, generally to the great advantage of the community, as the land in the hands of large proprietors is as a rule better managed and far more productive. I am bound to say," continues Mr. Coleman, "that the inferior and comparatively neglected condition of small freeholds interspersed among some of the larger estates was very apparent, and seemed to indicate that a still further absorption which, in the nature of things, must sooner or later occur, will be beneficial rather than otherwise. Of course in

more than five per cent of the farmers of England owned the land which they cultivated.⁵⁰

making this statement, I do not say there are not notable exceptions; but what I have stated is the general rule." (Ibid., p. 216.)

Mr. Doyle, in commenting upon the improvements in agriculture as in part due to the decline of landownership on the part of the farmers, says: "The class of freeholders, such as the 'statesmen' of the north, or the 'grey coats' farther south, are gradually disappearing through force of a law that is more effective than legislation." (Ibid., p. 260.)

Druce reports on the counties of Essex, Hertford, Huntingdon, Leicester, Norfolk, Northampton, Rutland, and Suffolk, and for these counties the common statement runs, "Peasant proprietors are rare and not more prosperous than the tenant farmers." Or "The number of peasant proprietors is very small. Or "There are hardly any peasant proprietors in the county." (Parliamentary Papers, 1882, C.—3375, pp. 5, 33, 34, 46, 65, 70, 87, 91, 29.) The Fen district of Cambridgeshire is noted as an exception to this rule." (Ibid., p. 14.) And of Hertfordshire he states, "It seems to me that there were proportionately a larger number of yeomen owners, that is to say, of farms 100 to 500 acres in this county than in any other in my district." (Ibid., p. 34.)

*John Rae: "Why have the yeomen perished?" *Contemporary Review*, October, 1883.

CHAPTER V.

THE RECENT DEPRESSION AND THE PRESENT SITUATION.

By 1836 the depression which followed the war had practically ceased and the period from this date until 1875 was, on the whole, an era of great prosperity for English agriculture. The repeal of the corn laws in 1846 wrought no important immediate results. The demand for agricultural produce was so great in England that large quantities had to be supplied from abroad. Some of this necessary supply had to be imported at great expense, hence, the prices of home productions were usually very high. Tenant farmers made much money and lived in a very high style, some of them even afforded liveried coachmen. During this period of prosperity farmers sometimes purchased land. A slight movement in this direction to some extent counteracted the result of the tendency on the part of landowning farmers to alienate their estates.

But by 1875 the foreign wheat supply had become more easily accessible, as well as more abundant; and the depression which followed ruined hundreds of farmers and rendered many of the landlords comparatively poor. There are many phases of this depression which have a peculiar interest to the agricultural economist, but none other could be studied with more profit than the inability of the landlords and the farmers to adjust themselves to the new situation. The depression has now practically passed, not because prices are better, but because a new generation of farmers who are willing and able to adjust themselves to the conditions under which world competition has placed them, have taken the place of those who could not succeed without high prices.

We are interested in this depression because of the effect it had upon the few remaining farmers who owned land. In 1895, the Royal Commission on Agriculture sent assistant commissioners into the various parts of the country to gather information con-

cerning the effects of the agricultural depression. Many of these assistant commissioners did not report upon the landowning farmers, possibly because they found no representatives of this class, but others have given valuable bits of information.

Cumberland still retained some of her "statesmen" in 1895, but the problems of the second quarter of the century were still confronting them.⁵¹ In consequence of the legacies and annuities which eldest sons had to pay on the basis of the high prices which prevailed before the depression of 1875, a great many yeomen farmers were "over head and ears in debt." Not only had prices fallen, but the number of years' purchase at which land could be bought had been reduced. These estates were usually mortgaged, and often so heavily, that the farmer who nominally owned his land had more to pay as interest than the tenant farmers paid as rent. It is said that this class of farmers had been gradually decreasing in numbers for many years. This gradual decline is illustrated in a most interesting manner by the figures available for the parish of Abbey Quarter, which are as follows :

Year.	Number of "statesmen."	Number of leaseholders.	Average size of holdings.
1804.....	83	None.	42 acres.
1848.....	81	6	54 acres.
1780.....	51	9	58 acres.
1812.....	39	18	58 acres.
1837.....	30	20	100 acres.
1864.....	21	29	100 acres.
1894.....	4	41	100 acres.

"There have been three causes for the gradual diminution in numbers of the statesmen," says Mr. Fox. "In the first place, many of them, tempted by the high prices offered for their land by large landowners, have sold. . . . Secondly, a number of them, since the lower prices, have let their land to tenants. But, thirdly, the qualities which are necessary to ensure success on a small holding, and which should be conspicuous both in the owner and his wife, namely, energy and thrift, are not necessarily hereditary qualities . . . and there are cases where land has had to be sold because the mode of life, which was pursued by the father, and accompanied by success, was not acceptable to the son."

⁵¹The Report by Mr. W. Fox, 1895, C.—7915—I., Sect. 51, forms the basis of this paragraph.

In Westmoreland the landowning farmers had gradually disappeared until, in 1895, they were nearly extinct. "However, we may regret the change," to quote Coleman, after Wilson Fox, "it appears to have been inevitable. Land is an expensive luxury, and not a profitable investment. As civilization progressed, and the cost of living increased, returns were not proportionately advanced. The land became gradually burdened with charges, and often suffering in condition, was eventually parted with, going as a rule to swell the larger estates. Nor as regards the public advantage, need such a result be lamented, for it is quite certain that a flourishing tenantry under a liberal and wealthy owner, are far more productive than owners whose means are too straightened to allow of the proper application of capital. Probably the most complete illustration of this change is seen in the Earl of Bective's fine property at Underly, which comprises about 25,000 acres, . . . A large part of this property was formerly owned by small proprietors, mostly statesmen. These men held on as long as possible, and were eaten up by debts and charges, and the soil wretchedly impoverished. The trustees of the late Alderman Thomson, who himself, if I mistake not, sprang from a statesman family, bought up the farms by degrees, and there is still money waiting similar investments. In no case did the investment pay more than two and three-fourths per cent on the purchase money. In many cases the former owners continued as the tenants; and when the land was drained and limed, and proper buildings erected, these men, who were formerly hard up, became well-to-do farmers. . . . The Underly Estate probably yields more than double the produce of which the land was capable when divided and ill-managed."⁵²

Writing of this same estate, Lefevre gives some additional facts which are very interesting and give clearness to the picture. "This great property . . . was gradually accumulated and purchased under the express direction of the will of a man who, two generations ago, made a large fortune in trade, and whose only daughter married a nobleman. The estate was made up of 226 different purchases, nearly all of them cases where the vendors belonged to the class of yeomen farmers, or statesmen, as

⁵² Report of Wilson Fox (Assistant Commissioner, Royal Commission of Agriculture), Parliamentary Papers, 1895, C.—7915—I.

they are called in that district, who, themselves and their ancestors, had cultivated their own lands for many generations. Instead then of 226 distinct owners of land, there is now a single owner. It may safely be assumed, in respect of this great property, that, under the existing system of family entail permissible by law, it will for generations to come remain intact in a single ownership."⁵³

Lincolnshire still possessed a large number of small peasant proprietors and some large yeomen farmers, in 1895. Many farmers had bought land during the prosperous times prior to 1875, and had paid double the price for which it would sell after the fall in prices had brought on the depression. A large proportion of the purchase money had frequently been obtained by giving a mortgage on the land, and in some cases the land had fallen in value until it was worth less than the face value of the mortgage. Fox says of these men, "Many . . . have already sunk, overwhelmed by the burden of interest they had to pay."⁵⁴ Mr. Fox devotes several pages to the condition of the small landowning farmers of the southern part of Lincolnshire. Most of these people worked hard and lived poorly. In reading the report one might easily think Mr. Fox was paraphrasing Young's report on the same district, written one hundred years before, were it not for the further evidence of ruin on every hand. In speaking of these small proprietors, Fox says, "The possession of land has been the ruin of hundreds in the past and is a millstone around the neck of hundreds in the present. Not the least regrettable reflection in this sad story is that most of these small owners are the flower of a class, the pick of the foremen and the labourers, who excelled in the performance of their duties, who toiled and saved and denied themselves for years to raise themselves out of one class into another, and who, when they had bought their independence and a new social position, found themselves bound to admit failure, their hard savings gone, their energies wasted, their hopes crushed, to retrace their steps back into the ranks out of which they had stepped, at a time of life when they had expended much of their vitality and all their ambition."⁵⁵

⁵³G. Shaw-Lefevre, M. P.: *Agrarian Tenures*, p. 12.

⁵⁴Fox: Lincolnshire, 1895, C. 7671, §95.

⁵⁵Fox: *Ibid.*, §109.

In Cambridgeshire the depression proved very disastrous to the farmers generally. The landowning farmers, burdened with mortgages, were the first to succumb; and those of this class who remained, in 1895, were in great straits. "In several districts," says Fox, "evidence was privately given me of this, and in one of them a gentleman, who was in the position to know the facts, stated that all the yeoman farmers there . . . were heavily mortgaged."⁵⁶

"We have had a good many yeomen in the County of Norfolk," said Mr. Read before the Commission in 1897, "and I say that they are much the hardest hit of all. They have to bear both the losses of the landlord and the losses of the tenant, and there have been the most disastrous failures. A good many of our farmers were told twenty-five years ago that the best thing that they could do was to buy their farms, and they did so, but they had not enough cash, and they had to mortgage their farms. They have gone to the wall worse by far than the common tenant farmers. There are a good many of our old and most respected yeomen who have disappeared within the last few years. I feel confident that they will almost all of them go unless there is a change for the better."⁵⁷

Speaking of Suffolk, Mr. Everett of the commission said, "We had a great many yeomen farmers and in the intense competition for land in the good times, a great many men took that course of making themselves, as they thought, independent; they bought land and mortgaged it, and I should think three-quarters of that class of men are now stripped of every penny they had."⁵⁸

During the "good times," the farmers of Wiltshire saved money and many of them were able to purchase farms, but as in other places, they borrowed money and their investment proved disastrous. One witness cited four instances within his own knowledge of farmers who bought their farms about 1875. Of these, two had come to grief and absconded, a third had lost his farm, which was in the hands of the mortgagee, while the fourth was still holding his land.⁵⁹

⁵⁶ Fox: Report on the County of Cambridge, 1895, C.—7871, §53.

⁵⁷ Parliamentary Papers, 1897, C.—8540, Read, §113.

⁵⁸ Parliamentary Papers, 1897, C.—8540, §113.

⁵⁹ Rew: Parliamentary Papers, 1895, C.—7624, §28.

In speaking of the condition of landowning farmers in general, the final report of the Royal Commission states that "As a rule their properties, whether inherited or purchased by the present proprietors, are charged with mortgages, and the mortgagee makes no remission of the interest due to him. In consequence of the shrinkage in the value of land, the interest on the mortgage has become in many cases a burden, which the owner has been unable to bear, and frequently where the yeoman farmer has succeeded in paying the interest due from him it has been a heavier rent than he would have paid to a landlord."⁶⁰

In 1900, over twenty-one million (21,286,632) acres, or eighty-six and one-tenth per cent of all the land under crops and grasses in England, was occupied by tenant farmers; while about three and one-half million (3,427,158) acres, or thirteen and nine-tenths per cent, was occupied by owners.⁶¹ But of this three and a half million acres no great extent was occupied by yeomen farmers. Indeed, the landowning farmers are at the present time very rare in England. By making close inquiry while passing through more than half of the counties of England in 1899, the writer found a scattering few who owned the land which they cultivated, but such farmers were extremely rare. The greater part of the land designated as "occupied by owners," was composed of the "Home farms" of landlords, and of farms which they had not been able to rent since the depression. In this way the Duke of Grafton occupied five farms besides his home farm, in 1899. The five farms aggregated five thousand four hundred and ninety acres. Each one of these farms, as well as the home farm, had a bailiff upon it. There were more than seventeen thousand (17,189) farm bailiffs in England according to the census of 1891. Tenant farmers who keep bailiffs are very rare. The vast majority of these bailiffs were, doubtless, operating land which is recorded in the Agricultural Returns as "occupied by owners." Between 1871 and 1881 the number of bailiffs increased nearly three thousand (2,889), which may fairly be looked upon as the number of farms which could not be rented, and which the landlords preferred to farm in this way rather than leave the land to

⁶⁰ Parliamentary Papers, 1897, C.—8540, §113.

⁶¹ Parliamentary Papers, 1901 (House of Commons), Vol. LXXXVIII, p. 38.

CHAPTER VI.

SUMMARY OF CONCLUSIONS.⁶⁷

We have seen that two hundred years ago more than half the farmers of England owned the land which they cultivated. To-day, practically all are tenants.

This extinction of the yeomanry took place in some parts of England during the eighteenth century. In some counties this was a result of the "new agriculture" which made inclosures and large farms more profitable than small farms in the common fields. The new agriculture required, also, that more capital be applied upon each acre, and calculating farmers found it profitable to rent as much land as they had the money to stock rather than to lock up their capital by investing it in high priced land. In other counties the yeomen farmers were crowded out by gentlemen farmers—men who, having made money in other pursuits, became farmers because agriculture was the favored pursuit among the wealthy classes of England.

But taking England as a whole there was no marked decline of the yeomanry until the third decade of the nineteenth century. Between 1820 and 1875 the number of landowning farmers was gradually reduced to insignificance. During this period the fact of greater returns on investments in farm stock than in land remained a constant factor. The neighboring landlords and men of wealth generally were still ready to consolidate small estates into large ones. But the condition which led to a rapid decline during this period was the fall in prices. During the Napoleonic wars, when prices were high and rising higher, it was possible to buy land and pay for it out of the profits of farming. It was then

⁶⁷In attempting to summarize the conclusions arrived at in this paper, there is a feeling on the part of the writer that general statements are always more or less inaccurate and it is chiefly for those whose interest in the subject is too general to lead them to read the whole paper that the summary is appended.

the common thing for the more successful farmers to invest their savings in land. As a rule, they purchased more than they could at once pay for and gave a mortgage to secure the payment of the indebtedness thus incurred. It was also common among the yeomanry for one son to succeed to the family patrimony upon the payment of certain sums for the provision of his brothers and sisters. Thus it was that a large proportion of the yeomen farmers were burdened with indebtedness, which the fall in prices made it impossible for them to pay. Some sold their incumbered farms within a few years. Others held out longer but in time they too gave up or died, and their farms were sold.

Farmers rarely invested in land after 1820. The farms were sold to wealthy men who wished to build up family estates. These large estates were valued for the social standing which they confer upon their owners as well as for their returns in the form of rent. They are commonly kept intact by a system of entails so that once the small estates become incorporated into the larger ones, they rarely come into the market again. There is still land for sale in England but the price is so high, compared with the value of produce, the expense of making the transfer so great, and the land-credit system so poor that farmers do not often care to indulge in the luxury of landownership. On the other hand, the relation between landlord and tenant is very satisfactorily arranged, the farmers are, as a rule, contented with the present system, and the fields of England prove that landownership on the part of farmers is not essential to good agriculture.

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1790. The Rural Economy of the Midland Counties. 2 Vols.
1796. The Rural Economy of the West of England. 2 Vols.
1798. The Rural Economy of the Southern Counties. 2 Vols. [William Marshall made a minute study of the agriculture of various parts of England and published his results in the volumes entitled "Rural Economy," etc., "Comprising the Management of Landed Estates, and the Present Practice of Husbandry." Marshall's work has been too little noticed by economic historians. Marshall was a contemporary of the well-known Arthur Young, and while the latter was the more spirited writer, the former was the more careful student, and wrote systematic treatises which are of far greater value to the student of agrarian history than the more general writings of Arthur Young.]
1794. THE BOARD OF AGRICULTURE OF ENGLAND.
Reports on the agriculture of the various counties of England. [These reports are in two forms,—the preliminary and the final form. The preliminary reports were issued as "printed manuscripts," simply. These were quarto reports with large margins on which practical agriculturists, to whom copies were sent, were asked to make corrections and additions. During the next ten or fifteen years the most of these reports were worked over or new reports made by other men, and published in octavo volumes, entitled, Agricultural Surveys. The following table gives the dates and the names of the authors of both of these sets of reports.]

TABLE,⁷¹ showing authors and dates of publication of (a) the draft (quarto) reports, and (b) the final (octavo) reports, on the several counties of England.

COUNTY.	(A) DRAFT (QUARTO) REPORT.		(B) FINAL (OCTAVO) REPORT.	
	Author.	Date.	Author.	Date.
Bedford	Thomas Stone	1794	Thos. Batchelor	1808
Berkshire	Wm. Pearce	1794	Wm. Mayor	1808
Buckingham	Wm. James and Jacob Malcolm	1794	Rev. St. J. Priest	1810
Cambridge	Chas. Vancouver	1794	Rev. W. Gooch	1813
Cheshire	Thos. Wedge	1794	Henry Holland	1808
Cornwall	Robt. Fraser	1794	G. B. Worgan	1811
Cumberland	John Bailey and George Culley	1794	John Bailey and George Culley	1797
Derby	Thos. Brown	1794	John Farey (3 vols.)	1811-7
Devon	Robt. Fraser	1794	Chas. Vancouver	1808
Dorset	John Claridge	1793	Wm. Stevenson	1812
Durham	Joseph Granger	1794	John Bailey	1810
Essex	Messrs. Griggs	1794	Arth. Young (2 vols.)	1807
Essex	Chas. Vancouver	1795	Thos. Rudge	1807
Gloucester	George Turner	1794	Chas. Vancouver	1810
Hampshire	Abr. and Wm. Driver	1794	John Duncumb	1805
Hereford	John Clark	1794	Arthur Young	1804
Hertford	D. Walker	1795	R. Parkinson	1813
Huntingdon	Thos. Stone	1793	John Boys	1798
Kent	John Boys	1794	John Boys	1805
Kent	John Holt	1794	John Holt	1795
Lancashire	John Monk	1794	R. W. Dickson	1814
Leicester	Thos. Stone	1794	Wm. Pitt	1809
Lincoln	Thos. Baird	1793	Arthur Young	1799
Middlesex	Peter Foot	1794	J. Middleton	1798
Middlesex	John Fox	1794	J. Middleton	1807
Monmouth	Nathaniel Kent	1794	Chas. Hassall	1812
Norfolk	Jas. Donaldson	1794	Nathaniel Kent	1798
Northampton	John Bailey and George Culley	1794	Arthur Young	1804
Northumberland	John Bailey and George Culley	1794	W. Pitt	1809
Northumberland	Robert Lowe	1794	John Bailey and George Culley	1797
Nottingham	Richard Davis	1794	John Bailey and George Culley (3rd ed.)	1805
Oxford	John Crutchley	1794	Robt. Lowe	1788
Rutland	J. Bishton	1794	Arthur Young	1808
Shropshire	J. Billingsley	1794	R. Parkinson	1808
Somerset	W. Pitt	1794	Joseph Plymley	1804
Stafford	Arthur Young	1794	J. Billingsley	1797
Stafford	Wm. James and Jacob Malcolm	1794	W. Pitt	1796
Suffolk	Rev. A. Young	1793	W. Pitt	1813
Suffolk	John Wedge	1794	Arthur Young	1797
Suffolk	Andrew Pringle	1794	Arthur Young (3rd ed.)	1804
Surrey	Thomas Davis, Sen.	1794	Wm. Stevenson	1808
Sussex	W. T. Pomeroy	1794	Rev. A. Young	1808
Warwick	Mr. J. Tuke, Jun.	1794	Adam Murray	1813
Westmoreland	Isaac Latham	1794	Andrew Pringle	1797
Westmoreland	Rennie, Brown, and Shirreff	1794	Andrew Pringle (3rd ed.)	1813
Wiltshire			Thos. Davis, Jun.	1811
Worcester			W. Pitt	1810
Yorks, N. Riding			John Tuke	1800
Yorks, E. Riding			H. E. Strickland	1812
Yorks, W. Riding			Robert Brown	1799

⁷¹ After Sir E. Clarke, Journal of the Royal Agr. Soc., Eng., series III., vol. IX.

1800. YOUNG, A.
The Scarcity of Wheat.
1801. MARSHALL, W.
On the Appropriation and Enclosures of Commonable Land.
1803. HUNTER, A.
Georgical Essays, 6 Volumes.
1823. CLEGHARN.
An Essay on the Depressed State of Agriculture.
1831. LOUDON, J. C.
Encyclopedia of Agriculture.
1833. Parliamentary Papers, Vol. V., Report of the Committee on Agriculture.
1836. Parliamentary Papers, Vol. VIII.
1837. Parliamentary Papers, Vol. V.
- 1836-57. TOOKE, T.
A History of Prices and of the State of the Circulation from 1793 to 1837.
1852. CAIRD, J.
English Agriculture in 1850 and 1851.
1855. LAVERGNE, L.
The Rural Economy of England, Scotland, and Ireland.
1874. JEFFERIES, RICHARD.
The Farmer at Home; The Labourer's Daily Life; Field-faring Women; An English Homestead; and John Smith's Shanty. [These five papers appeared in Fraser's Magazine in 1874, and have in recent years been published in one volume entitled "The Toilers of the Field."]
1878. CAIRD, J.
British Agriculture. Journal of the Royal Agricultural Society of England, second series, Vol. XIV., Part II. [This was reprinted as "The Landed Interests."]

66 BULLETIN OF THE UNIVERSITY OF WISCONSIN.

1895. ROYAL COMMISSION ON AGRICULTURE.
 Reports by the Assistant Commissioners.
1897. Final Report.
1896. BOARD OF AGRICULTURE.
 Returns as to the number and size of Agricultural
 Holdings in Great Britain in the year 1895.
1901. Annual Returns.

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BULLETIN OF THE UNIVERSITY OF WISCONSIN

NO. 101.

ECONOMICS AND POLITICAL SCIENCE SERIES, VOL. 1, NO. 2, PP. 67-214

**THE HISTORY OF AGRICULTURE IN DANE COUNTY
WISCONSIN**

BY

BENJAMIN HORACE HIBBARD

Associate Professor of Economics, Iowa State College

**A THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
UNIVERSITY OF WISCONSIN
1902**

*Published bi-monthly by authority of law with the approval of the Regents
of the University and entered at the post office at
Madison as second-class matter*

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PREFACE.

The purpose in choosing this subject for a thesis was to make a beginning in an interesting and unexploited field of economic history, rather than to produce anything of widespread interest. Yet as limited as the subject is, it has proved to be too extensive for a monograph of this kind, and several chapters are withheld, while still others remain for future research. There is an opportunity for much work on the live-stock industry, but it can be treated more advantageously for the state than for the county. The tables in the appendix give a few bare facts on the subject.

There is a wealth of material for the writing of agricultural history, but as indicated in the short bibliography of this thesis, it is in newspapers and various government reports for the most part, and great patience is required for its discovery and collation. The information to be had at first hand is also of prime consideration. Such work as this, when further developed, ought to find a place in college courses on scientific agriculture or general industry.

Should this study seem to be overburdened with minor detail, it is largely due to the fact that it involves the interpretation of the simple pioneer's life, of the locality studied. To strip it of these amplifications would, in the estimation of the writer, rob it of its main value.

The writer wishes to acknowledge his obligations to Professor Ely and Professor Turner of the University of Wisconsin, under whose direction the work was undertaken, and to whose kindly suggestions and encouragement much is due. Valuable criticisms have been offered by Dr. H. C. Taylor of the same University. But thanks are due no less to the good people in various parts of the county who so generously assisted in bringing back the spirit

of the early experiences of the pioneer, without which it would have been impossible to give meaning to much of the data available. Lastly, the librarians of the Wisconsin Historical Society and the University earned the writer's gratitude by assisting him more than mere duty required.

The maps in the appendix were drawn by Mr. J. W. Johnston of Ames, Iowa.

Iowa State College, Ames, Iowa, September, 1904.

PART I.—EARLY CONDITIONS.

HISTORY OF AGRICULTURE IN DANE COUNTY.

CHAPTER I.

INTRODUCTORY.

It is the purpose of this work to give a view of the agriculture of Wisconsin both past and present. As it is, however, impracticable to deal with the state as a whole, the choice of a part of the state which shall at once be suitable in size and representative in character is a matter of no small consequence; and fortunately the county of Dane seems to contain within its borders a very generous share of the agricultural activities and possibilities of the entire state. More especially is it representative of the southern portion of Wisconsin, that is to say, of the agricultural portion. The name Dane was given to the county in honor of Nathan Dane of Massachusetts, the reputed author of the Ordinance of 1787 for the Northwest Territory, and not because of the presence of Danes as is frequently supposed. The county was set off from the west part of Milwaukee, and the east part of Iowa counties in 1836 but was not organized as a separate county until 1839.¹

The county is a large one, being more than twice the size of the common checker-board county, and contains thirty-five townships, or towns, as they are for the most part called.² Its position is midway between Lake Michigan and the Mississippi river and twenty-four miles north of the Illinois line. "The forty-third parallel of latitude passes within a minute fraction of the center

¹Lapham's *Wisconsin*, p. 218.

²Townships will hereafter be referred to as *towns*, while towns, as usually known in the west will be called *villages*, since this usage seems to be a permanent evidence of the early New England and New York settlers.

at longitude $89^{\circ} 20'$ west from Greenwich. Its altitude above sea level is 788 feet at the level of Lake Mendota, and is 210 feet above Lake Michigan at the same point.³ The area is about 1,235 square miles, or 790,400 acres. In shape it is an oblong with one corner lacking, the Wisconsin river forming the boundary at the northwest for some ten or twelve miles. About thirty-five square miles are covered with lakes, leaving the land area approximately 1,200 square miles. Were it not for this water area, and the small triangle which would naturally belong to the county but for the Wisconsin river, Dane county would be almost exactly the size of the state of Rhode Island, yet it constitutes less than one forty-fifth of the state of Wisconsin. By number the towns are designated as townships 5 to 9 inclusive north (that is north of the Wisconsin-Illinois state line taken as the base, and ranges 6 to 12 east of the fifth principal meridian. Thus it is thirty by forty-two miles, the long dimension lying east and west. On the north are the counties of Sauk and Columbia; on the east Dodge and Jefferson; on the south Rock and Green; on the west the county of Iowa. The jog which occurs in the east and west lines between ranges 9 and 10 is the result of two separate surveys which for some reason or other failed to match, this north and south line having been previously fixed as the division between the Milwaukee and the Mineral Point land districts.

DRAINAGE AND TOPOGRAPHY.

About 120 square miles drain toward the Wisconsin river, the rest of the country shedding its waters to the southeast where by various channels they reach the Rock. The dividing ridge between these two river systems is the long, irregular, limestone ridge of prairie land which extends well across Columbia county to the north. This ridge is cut by a deep valley which runs from Lake Mendota to the Wisconsin river and is only about eighty feet above the lake at the highest point. It is said that the Indians used this as a "portage" between the two river systems, there being but a short interval between the head waters of the

³*Statistics of Dane County.*

⁴This is condensed from the *History of Dane County*, and supplemented by observation.

two little streams which run in opposite directions through the valley.⁵

The surface of the county is for the most part rolling, though considerable areas are flat, while it is not unusual to find several square miles of country that is rugged to the extent of being nearly worthless. The most important of these hills are the Blue Mounds in the western part of the county which rise about a thousand feet above the surrounding country, while radiating from them are long high ridges of hills with narrow valleys between. At the northwest corner is a tract of broken country, the hills being little cone-shaped knobs, rising 200 or 300 feet above the river, and showing on their rough sides the various geological strata of which they are remnants. The southwestern part is hilly, the streams having cut valleys a hundred or two hundred feet below the general level. This is a "driftless" district (see Map III. in appendix) and here the drainage is perfect, for there are no lakes and hardly a swamp.

Within the glacial area there is a marked difference in the general appearance. Here we find the lakes and the swamps, the latter often having no outlet on account of the irregular moraines. The well-known "four lakes" lie in a northwest and southeast direction almost parallel to the line marking the limit of glacial action, and the Yahara, or Catfish, which drains them and is the main river within the county, has had to wear its way across many of these small hills. The other lakes, though numerous, are comparatively unimportant, while the streams are neither so numerous nor so regular in their courses as in the driftless area.

"The Dane County list of geological formations includes nearly the whole Wisconsin series." Map II. (see appendix) which is enlarged from the atlas of maps made by the Wisconsin Geological Survey, 1882, gives a good general idea of the formations. Since we are here interested in geology only as it helps us to understand soils and vegetation we will turn our attention at once to these matters. The soil map is far from being satisfactory. It could not be expected that a map made for a whole state could be accurate in minute details, but it seems hardly pardonable to have the town of Roxbury represented as sandy loam, when as a matter of fact the soil is a stiff clay with the exception of

⁵Governor Doty's first message to the assembly.

a narrow strip along the Wisconsin river, and a few unimportant creek bottoms extending back among the hills. And yet if not taken too seriously, the map is worth something; it probably gives a fair idea of the relative amount of prairie, clay, and swamp soils, and in the main, their distribution is shown with tolerable accuracy, the above mentioned error being much the worst.

It is of interest to note the variety of soils as seen in the different geological areas, but the very fact that such a number of formations appear within so small a compass complicates rather than facilitates such a comparison. In the first place the greater part of the county is modified by glacial drift, and within the driftless area several distinctive soils are evident. It must be remembered that the elevations of this area are entirely the result of erosion, and thus the level of Blue Mounds a thousand feet above the Wisconsin river is a point in an ancient plain. The three upper strata of this mound are limestone, the little plain of some sixty acres at the very summit has a rich black calcareous soil, and the blue-grass carpet which covers every nook is as luxuriant as on any lawn. Farther down, at about the level of the Galena limestone, though no doubt mixed with debris from the strata above, is another little plain somewhat larger than the first and with identical characteristics. Throughout the driftless area these limestone soils are to be found along the ridges of hills that separate the streams, but for the most part the finer and better part of the soil has made its way to a lower level, thus leaving a representative limestone soil on comparatively small spots only. The St. Peters sandstone is quite soft in most places and hence seldom remains as the permanent bed of a stream, and on this account there is no considerable extent of sandy soil resulting from this formation; the sand appears merely as a narrow fringe around the borders of the Trenton limestone districts or is mingled with the stiffer clays of the Magnesian limestone below, and, for the most part is a valuable addition. Along the Wisconsin and around the lakes the Potsdam sandstone comes to the surface and here we find a soil which may very properly be termed sandy and is the poorest in quality with which we have to deal. In wet years these sandy lands produce excellent crops, indicating that it is owing fully as much

to the very porous character of the sub-soil as to a lack of vegetable food, that they are of less value. The prairie soil is nearly everywhere black with no great amount of sand and usually with a clay sub-soil containing considerable gravel, while within the glacial area boulders are everywhere numerous. **This black soil** is not deep, as one who is used to the great stretches of prairie beyond the Mississippi understands it, but is from six inches to a foot on an average with a thicker layer in the valleys. This prairie soil is decidedly stiffer than that in Iowa or Nebraska because of a larger percentage of clay, and no doubt the fact of the more rolling surface has resulted in a smaller deposit of humus. It is a common sight in almost any part of this county to see brown spots in the plowed fields where the plow has reached below the black soil and turned up some that is largely clay. It will be noticed from the maps that the clay soils and the oak districts are for the most part identical areas. When this land is first plowed there is a brown or black layer of rich leaf, or other vegetable mold, which has been accumulating for ages, and it is to this that the phenomenal fertility of the virgin soil was largely due. This, however, gradually disappears with cultivation, leaving a yellow clay which, though rich, is a soil not easily worked and which must be handled with no little skill to prevent it from "baking" and becoming almost unmanageable for the year. Plowing must be done when the ground is comparatively dry; even the trampling by horses or cattle is counted a serious matter when the soil is full of water.

In the marshes or dry lake beds is a rich black soil termed muck. This is rich in humus, and even partially decayed vegetable matter appears in large quantities. For the most part this land is used for meadow or pasture though occasionally a piece is cultivated, and, especially where there happens to be a liberal admixture of sand, rendering it sufficiently porous, it makes the most productive of fields. Such land yields large quantities of tobacco⁶ or corn, but is not a success for small grain, being too rich in nitrogen, thus making a great weight of straw and leaf with too little mineral substance to afford the required stiffness of stalk, and the result is a tangled mess of straw with very little

⁶It is very rarely that it will do for tobacco, but when it happens to be mixed with sand it yields an excellent crop.

grain. The texture of the soil in general resembles that of Illinois much more nearly than that of Iowa or Minnesota, yet it is "heavier" than that of either of these states, that is to say, it has more clay and less sand.

Along the north line of the county, covering parts of sections 3, 4, and 5 of the town of Roxbury, is a little stretch of soil worthy of special mention. This is on the border of Fish lake. At some time when the lake must have been several times its present size, there was deposited a layer of blue clay not far from a foot in thickness. The early settlers avoided the spot until all other land which seemed capable of being made into a farm was gone, and then reluctantly took this. However, it has turned out better than they thought. It seems to be fairly rich in plant food, so the only difficulties are those arising from its mechanical nature. By all means it must not be worked when wet, and even with the utmost care in this respect, it is inclined to remain in a comparatively hard state, thus giving off moisture readily and rendering it unable to withstand a drouth. Clover improves this soil and at the same time makes a very good crop, hence there is a tendency to raise clover and corn rather than small grain. Coarse manure is beneficial, as it helps to keep the ground porous.

VEGETATION.⁷

It is by no means necessary to go into detail in describing the great variety of plants found in this part of Wisconsin. The list of trees, shrubs, flowering plants, and grasses, is a long one, and the picturesque and pleasing aspect thus presented to the early travelers was frequently the source of extravagant and poetic effusions which are still preserved in the old newspaper columns. The nature and extent of woods and prairies, with the means they afforded for homes and agricultural undertakings are the main questions that concern us in this connection. There are to be found numerous accounts of travelers who "passed through dense forests in the region of the 'Four Lakes' and Blue Mounds," but by all that can be gathered from men who still remember the woods as they appeared at the time of settlement it seems that

⁷For an extended treatise on Wisconsin flora see an article by J. A. Lapham in *Proceedings of Amer. Assn. for Advancement of Science*.

the "dense forests" were by no means entitled to so dignified a term. The principal trees found within the county were white oak, burr oak, red oak, hard and soft maple, box elder, elm, ash, walnut, hickory, cottonwood, birch, tamarack, willow, and plum, together with a few unimportant varieties. There was also a considerable number of shrubs and vines, which at times formed such a tangled thicket that passage through them was difficult and slow. But, with all this variety of forest elements there was very little area given over wholly to its influence, and as a matter of fact the surveyor's or prospector's progress was seldom seriously impeded by dense woods. Map I. (appendix) showing the soil and general vegetation of the county, it will be seen, gives the "oak lands" as the largest in extent. By that we understand merely that the oaks predominate and it is within this area that all the other trees are found, a single exception being the tamaracks, not shown on the map at all; these were to be found in a few swamps in the northeastern part of the county. And even this does not give an adequate idea of the original condition of the woods. We have here an excellent demonstration of the constant struggle going on between woods and prairie, in a region favorable to either; that is, aside from soil considerations, a region moist enough for the former, and at the same time dry enough for frequent and extensive fires. Along the ravines and on the steep hillsides the woods triumphed, and the grasses are few and unimportant; on the level, or rolling surface of a much larger area, fires ran from time to time destroying the trees entirely, thus forming prairies, or, as was oftener the case, killing out all trees except the burr and the white oak which seem able to stand considerable punishment of this nature. In this way the famous "oak openings" so common in Wisconsin and Illinois were made. These "openings" have been aptly described as immense "orchards" of stately oaks—usually the burr oak—standing well apart, their superb tops spreading over a radius of forty or fifty feet, yet with plenty of room for wind and sunshine between, favoring the presence of prairie grasses or hazel brush.⁸ If we could go back over the natural history of the region we should

⁸In the towns of Rutland and Albion are still to be seen a few acres of these trees much as they were fifty years ago except that blue-grass replaces the brush and wild grass among them.

without doubt find these oak openings and the prairies alternately advancing and receding over the same spots. This is shown conclusively in the changes that have taken place within the past half century: in places where the scattered woods have succumbed to ax and fire the prairie grass has come in and flourished; while,—and this more frequently,—the oaks have sprung up like magic and made fine groves where not a tree was to be seen until the settlers stopped the annual course of the fires.⁹ A great many fields are to be seen which have the appearance of having been wrested from veritable forests, if one is to judge by the trees around the border. Usually this ground was broken by the powerful ox teams hitched to plows of immense proportions, and only occasionally was it necessary to turn aside for some oak, or to use grub-hoe and ax to remove roots too large or too hard to be cut by the share.

For the most part the prairies were featureless; the principal grasses were short and thin on the ground, but the sod was tough. This grass was of great value to the settler, providing pasture for his teams and cows in summer and hay in winter. In quality it compares favorably with cultivated grasses but when mowed for a number of years, decreases very much in yield, and if pastured, soon disappears altogether. To one familiar with the broad prairies¹⁰ of the West these little patches of grass seem hardly worthy to be called by the same name, and there is in fact a wide difference between them, other than in size. Here the prairie soil is shallow, the grass rather scant, it being almost altogether on high dry land with the intervening depressions appropriated by woods, and any considerable area of wet land being invariably a swamp or marsh. In the West, for example in north-

⁹From the home of Mr. Amos Chase of Dane, there are now extensive stretches of woods to be seen; these groves are largely of black oak and are of fair size, often measuring from eight to eighteen inches in diameter, yet Mr. Chase tells me that when he moved to his farm in 1853 he could count every tree in sight without any difficulty. A few miles from here Mr. Robert Steele, in about 1849 or '50, plowed through a half mile or more of hazel brush and grubs (oak roots grown to great size, but with almost no tops because of repeated burning) for the purpose of making a permanent wagon road. The road is still in use, and of the usual width, yet the oaks, in places, almost meet over the traveler's head.

¹⁰*Prairie* in a prairie region is used to denote wild, uncultivated land, and not merely land which at one time was covered with grass instead of woods, as it is made to mean in Wisconsin.

western Iowa, many parts of Minnesota, or in eastern Nebraska, the prairies reached mile after mile across a gently undulating plain with but few ridges so high as to bear thin crops of grass, while the long gradual slopes and sloughs, with their deep black soil, often produced "blue joint" and other grasses in quantities equaling the yields of clover and timothy of the present day. The marsh grasses in Dane county make a ranker growth and were the main reliance for hay until the cultivated grasses became common; even yet marsh hay is of great importance, though clover and timothy form the bulk of the product, and the marshes are now much used for pasture. This coarse wiry grass was utilized by the early settlers for covering cattle-sheds, horse-stables, and granaries, and occasionally a foreigner who understood the art of thatching made of it a very serviceable roof for his dwelling.

CHAPTER II.

THE MOVEMENT OF SETTLERS TO WISCONSIN.

No attempt will be made to give in detail the multifarious reasons which resulted in the movement of so many different classes of people to Wisconsin during the second quarter of the nineteenth century; to do so would require a history of Europe and America for that period. All that is here attempted is to show in rather rude outlines, the more immediate influences that contributed to the peopling of southern Wisconsin with the class of emigrants who gave form and color to the whole subsequent history of the state.

It will be remembered that Wisconsin had been more or less known to white men for two centuries before, and a considerable number of settlers had made their way to her borders. Hunters and trappers had long been familiar with the Fox-Wisconsin waterway, and vague reports were current about a lake region to the south of the portage. However, it was the lead region which first attracted workmen who settled down to making a livelihood by plain toil within the territory. Many of these miners at first with no thought of remaining longer than a season or two, in fact going back to civilization to pass the winters, finally became permanent residents and took part in the early territorial organization.

These men had come from the Illinois country, many of them finding their way to the West along the course of the Ohio. Thus the first settlement of consequence, outside the old trading posts, was made in the southwestern part of the state, by men who had made their way against the current of the Mississippi, or had come overland from the lead regions of Illinois. The first modern agriculture within the state was in the vicinity of these

diggings, before the land was put on the market. Unlike the hunters and trappers, the miners were anxious to have farmers for neighbors, so as to bring the prices of provisions to a lower level and, in consequence, the reports given by these men as to agricultural possibilities of the new district were glowing yet not untruthful.

The first permanent settler in Dane county, Mr. Ebenezer Brigham, was a lead miner who was tempted to set his stakes far in advance of his fellow adventures. The Indians still claimed the region and killed several men near this pioneer's cabin. The Winnebago war in 1827, and the Black Hawk war of 1832, prosecuted as they were by Illinois militia, gave a large number of energetic young men a glimpse of a fine country, and as Professor J. D. Butler puts it, each one of the soldiers in the Black Hawk war chose for himself a fine quarter section and came back to settle on it.¹¹ This is not intended for a literal statement, but it is certain that many of these boys did return to take up government claims. It was the final blow to the Indians given by these wars that brought the region into good repute among the peacefully inclined foreigners, and even the aggressive New Yorker and New Englander preferred a habitation safe from Indian depredations.

The next general force that induced western emigration was a financial one, and its effects were exerted in a twofold manner:

First, the ease with which money was obtained by speculators, especially in the year 1836, resulted in an unusual interest in western lands. Hundreds of pieces of this land changed hands within a year or two, the presumption being that the purchaser was unable to hold it, or was at least sufficiently discouraged to prefer some other sort of investment. There are various scattering reports to the effect that much of this land was sold for less than had been paid to the government for it. The records of deeds given do not in any considerable number of cases bear out the statement, but still it seems not altogether unlikely. At any rate, much of the land was re-sold at about the government figure, and on mortgage at that, thus helping those of little or no means to get hold of a piece of land. There are also numer-

¹¹ *Wis. Hist. Coll.*, X., 80.

ous instances of exchanges of western land for various pieces of eastern property.

Second, the failure in business of a large number of men in the East turned attention to the West as a place in which to start anew. The importance of this factor can hardly be overestimated. It was not men fond of the fringed hunting shirt, the long rifle, and the general absence of civilization; not the class who were anxious to escape from the restraints of old traditions and customs, not to say laws, who turned their faces toward Wisconsin during the few years following the panic of 1837. The majority of the settlers who bought government land in Wisconsin before 1845, were from the farms and villages of New York and New England. True, there were many Norwegians and Germans who came almost as early, but these were not yet citizens, and so it may be said without qualification, that the people who first organized the territory of Wisconsin, and for that matter almost all of the counties within the state, were the sober New York and New England people.

Of this there is abundant proof. For example, in the town of Roxbury, Dane county, the Germans have been entirely in the majority, except for the first few years, and this is an important exception. In the list of town officers for the first year or two there is not a German name. The name Roxbury was given by a New York man who had lived in a town of the same name in his native state.¹²

It is to these first organizers that credit is due for the vigorous strides so early taken in establishing a public school system, the equal, if not the superior, of that which they had known in the eastern states. They were not afraid to vote taxes for improvements which were seen to be primarily needed for the comfort and advancement of the new community. It may be objected that these same institutions are also the work of foreigners; but when it is remembered that there were two main classes of foreigners who came at that time, that they were settled in communities by themselves, unable to read or understand English, yet necessarily subject to our laws, it is hard to con-

¹²This is Mr. Jas. Steele, one of the oldest residents of the county, now living in the town of Dane. It is also of interest to note that Roxbury, New York, is in a district settled about a century ago by Massachusetts people who likewise had brought the town name with them.

ceive how by any chance the Norwegian or the German, or both of them, could have attended to the organization of a school system, the administration of justice, the recording and securing of land titles, and the transaction of many other duties which play a large rôle in the beginning, as well as in the later history of any commonwealth. Yet it seems that it was by mere chance that a sprinkling of intelligent Americans preceded the rush of Europeans to this state.

Taking up the thread of our general narrative again, we remember that there were no railroads to the West, that the Erie canal furnished the great highway from New York and New England to the lake region and at the same time to the greater part of the Northwest Territory. It was up this canal and through the lakes to Milwaukee or Racine that nearly all of the eastern emigrants found their way to Wisconsin. The journey was long and tedious, often occupying two or three weeks' time; freight rates were so high that as a rule very little was brought besides a box of household goods and the family clothing. The foreign emigrants after landing at New York City came over this same route. The Indiana and Illinois people who desired to move to a newer country usually travelled with "prairie schooners," and took their farm stock and implements with them. No date can be set for the time the latter moved to Dane county. They began to arrive early and continued coming but formed no distinctive settlement of their own. From Ohio the emigrants came mostly by boat through the lakes, but a few by wagon. The Ohio settlers formed two distinct groups, one in the town of Dane, the other in the south part of the county near Wheeler Prairie.

A combination of circumstances resulted in the great influx of Germans. Political reactions had kept them uneasy in the Fatherland for some years, and beginning about 1830, there was a great emigration to America. By the time of the greatest movement of Germans to this country, i. e., 1844 to 1854, the greater part of desirable government land in Ohio, Indiana, and Illinois was gone, leaving the choice between Wisconsin, Iowa, and Missouri, and possibly Minnesota; but although these other states succeeded in enticing a few of the newcomers, Wisconsin was favored with the largest share.¹⁸ As to Dane county, it was

¹⁸ *Wis. Hist. Colls.*, XII., 8.

attractive in the main as a convenient and representative part of the state. But there was a quiet though powerful force at work in one corner of the county which resulted in a solid settlement of German Catholics.¹⁴

It remains to speak of the Norwegians, and this subject is treated at length by Prof. Rasmus Anderson in his "Norwegian Immigration." As here shown, the sixth colony of Norwegians in America, and the third one in Wisconsin was in Dane county, near Lake Koshkonong. The first Norwegian of this county settled in what is now the town of Albion in the spring of 1840. The preceding fall a small party of Norwegians from La Salle county, Illinois, had come to Dane county via Milwaukee, making the entire trip on foot; they located land in Christiana but went to a settlement on the Fox River to pass the winter. Some more Norwegians making the trip through the lakes to Chicago walked overland to Beloit in 1839, and in the spring came up Rock River in a boat and took land in Albion. From this time on there was a steady stream of Norwegians to Dane county.

Both the Norwegians and the Germans were almost entirely without resources when they reached Wisconsin. They frequently worked out by the day or month for pitifully small wages in order to get the first fifty dollars to pay for a forty. Very often the only house they had was a "dugout," made by digging a cave in the side of a bluff and covering it with brush and hay. Many of them were twenty or more miles from market, or from a doctor, and worse yet, had nothing to pay either for provisions or medicine; but credit and courage carried them through.

¹⁴"Father Adelbert Inama came to Roxbury in 1845 and this determined the future nationality and religion of the town. He was a highly educated young German Catholic priest. After coming to America and living two years in New York, he pushed westward and at the above date, built a little log cabin in a secluded dell, back a few miles from the the Wisconsin. There was but one Catholic in the town at the time and he not a permanent settler; of Germans of any sort there were almost none. Father Inama, an enthusiast, and at the same time an able writer, set about the task of persuading his Catholic countrymen to emigrate westward. Entering a considerable amount of land for himself, he held it for his friends and let them have it for the original government price which it had cost him. The response was strong, for soon there had clustered about him the desired parishioners, both from other states and from the Fatherland. For a few years the Americans were in the majority, but no sooner had the foreigners obtained their naturalization papers than they out-voted the rest and to-day the town is as free from people of English extraction as Germany itself."—*History of Madison, Dane County and Surroundings*, p. 500.

CHAPTER III.

THE PURCHASE OF LAND FROM THE GOVERNMENT.

The land laws under which the land of Dane county was purchased from the federal government were comparatively simple. The system of credit had worked itself out into such a nuisance that after 1820 cash payments were required. The clamor of the poorer class of purchasers had resulted in a series of reductions in the minimum number of acres sold in a unit lot, until congress, on April 5, 1832, passed an act requiring the public domain, still unsurveyed, to be divided into forties, and after that each forty was sold separately. This was just in time to insure the division of Dane county into these smaller lots, as the survey of southern Wisconsin was then in progress, this county being finished in 1834.¹⁵ There seems to be no particular order in the way land was put upon the market, except that it had to be surveyed. The land to be sold was "proclaimed" by the president not less than three months, or more than six months before coming into market, i. e., it was advertised in certain newspapers officially designated, and descriptions by number were given of each separate parcel offered. These proclamations were copied by western newspapers so that ample notice was given to all interested. It is worthy of note that in most cases the land offered for sale was scattered promiscuously about, so that it was difficult to buy more than a quarter or half section in one block. It would appear that this was a precaution against purchase by speculators of large tracts in a body, purchase that would give them the power to control and retard actual settlement to a greater

¹⁵ Archives, office of secretary of state.

degree than where their holdings were more or less interspersed with actual home-seekers ; but there seems to be no available testimony on the subject. At all events, the entry-book shows numbers of whole sections side by side sold to one man in 1836, while, in later instances, equally large purchases are distributed over perhaps a quarter of a town.

By act of congress June 23, 1834, that part of Wisconsin east and south of the Fox and Wisconsin Rivers was divided into two land districts. The division line between them passed through what is now Dane county, that part west of the line between ranges eight and nine being in the Wisconsin land district, and the portion east in the Green Bay district. The Green Bay district was cut in two by act of June 15, 1836, and the southern part was called the Milwaukee district. A few pieces of land in Dane county had been entered at Green Bay previously to this date, but with this exception the entries were made at Milwaukee and at Mineral Point.

The method of selling government land was the same as had been followed almost from the beginning of public land sales, although some very important modifications had been imposed by the buyers themselves. The land was offered at auction to the highest bidder, with the minimum price set at one dollar and a quarter.¹⁶ It rarely happened, however, that the bids were above this minimum no matter how desirable the land or how numerous and keen the bidders. The buyers soon came to see that such an auction was an example of one-sided competition for as soon as the dollar and a quarter bid was made, no matter how little they had in common beyond the desire to buy at the cheapest figure, they managed to coöperate with great success for securing this result. That these organizations were wholly voluntary no one pretends. Neither can it be supposed that all the bidders present subscribed to the requirements for membership in the organization, but circumstantial evidence is abundant to show that the speculator rarely "volunteered" to over-bid the humble settler who came with perhaps fifty dollars to pay for a forty, although it would appear that any bid above the minimum would secure him the land. The commissioner of the general land office at Washington in a circular letter dated April 11, 1836, complains

¹⁶There was no "double minimum" land in Dane county.

that receipts from sales of public land had been cut down by some millions of dollars by these "unlawful organizations" of buyers who prevent many from bidding.¹⁷ It is further stated in the president's annual message of 1837 by way of emphasis of the same point, that the sales during the period from 1820 to 1837 had not averaged more than six cents per acre above the minimum price. The president also advised that the squatters be given the preference in preëmption privileges. This was really before a preëmption act of general application existed, although something analogous to this right had been given some squatters on the Symmes tract in Ohio in 1801.

Mr. Donaldson in "The Public Domain" defines preëmption¹⁸ as a "preference right" and states that, "The essential conditions of a preëmption are actual entry upon, residence in a dwelling, and improvement and cultivation of a tract of land;" again it is "a premium in favor of, and condition for making permanent settlement and a home." It would require many pages to give the separate acts under which the land of this county was preëmpted, but it seems sufficient to state that the more important were those of June 22, 1838; June 1, 1840; and September 4, 1841. The many changes made in those various acts were designed to fit varying needs, but any one of them covered substantially the conditions existing in Dane county. The importance of this legislation is well shown by Mr. Donaldson: "The preëmption system arose from the necessity of settlers, and through a series of more than fifty-seven years of experience in attempts to sell or otherwise dispose of the public lands. [He has reference to a time later than the one we are considering.] The early idea of sales for revenue was abandoned and a plan of disposition for homes was substituted. The preëmption system was the result of law, experience, executive orders, departmental rulings, and judicial construction . . . it has always contained, and to this day contains, the germ of actual settlement under which thousands of homes have been made and land made productive. . . . The necessity of protecting actual settlers on the public domain and giving a preference right to those actually desiring to make

¹⁷Amer. St. Papers, *Public Lands*, VIII., p. 610.

¹⁸Donaldson, T., *Public Domain*, p. 214.

homes therein became more apparent in the years 1830 and 1840."¹⁹

The act of September 4, 1841, was the most complete and specific of those that applied to Dane county. It provided that on any land already surveyed those who had, subsequently to June 1, 1840, settled, or who should in the future settle and improve a claim not exceeding one hundred sixty acres, could secure the claim by making an affidavit to the register of deeds, setting forth the time and nature of the settlement and improvements, and the intention to purchase the same within twelve months, at the regular minimum government price. Thirty days was allowed a settler in which to appear at the land office and file his pre-emption papers. A fee of fifty cents was required for the filing of these claims.

SQUATTERS' PROTECTIVE ASSOCIATION.

Wisconsin was never noted for lawlessness, and the outlaw type was not in the majority, at least not after the real settlement began. This was principally owing to the steady, earnest character of the people who had come from civilization and had brought it along with them. To a less degree the policy of the government in providing a judicial system fairly well organized, even before there was a demand for it from the settlers themselves, was, no doubt, a wise one for fostering good behavior.²⁰ But although the frontiersmen were by no means strangers to courts, and were peaceably inclined, it must not be supposed that they were so effeminately law-abiding as to stand by and let their interests suffer at the hands of land grabbers, or to await the sluggish stages of legal process to overtake and punish the offender. The one great instance in which the law was made and enforced, independently of judge or code, was in the protection of the squatter against the claim jumper.²¹ Under the system then in use it was utterly im-

¹⁹*Ibid.*, 215.

²⁰Ebenezer Brigham was a justice of the peace for years before there were men enough in the county to form a justice's jury.

²¹The term "claim jumper" in Wisconsin does not mean a man who takes possession of a claim by using a gun, but a man who buys land upon which an actual settler has made his home.

possible to offer the land for sale just as it was wanted, and no one who has any insight into frontier conditions can blame the frontiersman for taking possession of the land best suited to his purpose of making a home. After once settling down, building a house, clearing off the timber, or turning the sod, it is entirely contrary to the laws of humanity to allow the homestead to be usurped by some greedy interloper, whether or not the law is technically on his side. It is true the preëmption act was supposed to give the squatter all needed advantage, but it is just as true that money was likely to be as scarce and as hard to get hold of at the end of the first year as at the beginning. The officers of the law and those who had charge of selling the land had no authority to show further favors to the man in possession, though in most cases they seemed disposed to do so.

It was at this juncture, when no help was to be had from others, that the Dane county pioneers showed themselves to be typical pioneers—thoroughly able to help themselves. The squatters were often sneered at and called out-casts by congressmen and others who had interests at stake.²²

Agreements were made among the squatters, in fact among the great majority of the buyers on the occasion of public land sales, that no one should bid against another.²³ Speculators often had agents on the ground to snap up bargains for them, agents who were more or less discreet and did not endanger their personal welfare by any over-zealous efforts to buy land upon which the agents of the squatters advised them not to bid. An exact record of the conversations of these two sets of agents on some occasions would, no doubt, be a delicious morsel of history, but none can be found.

²²"The rights of the settlers upon public lands are universally respected. . . . It is chiefly by the labors of the settlers that the lands of the non-resident acquire value. . . . The character of these settlers is often very much misunderstood and often much misrepresented in many parts of the union. In Wisconsin they will compare with any of the farmers of the eastern states. Indeed, as a body they are men of whom any state might be proud. . . . Among them are those who hold seats in the legislature—those who have been reared in the colleges of the East—those who have been accustomed to all the elegances of society."—*Wis. Enquirer*, Mar. 16, 1839.

²³"At a public meeting resolutions were adopted for the purpose of securing to actual settlers the possession of the lands squatted upon either before or after the government survey"—notice the last clause.—*Milwaukee Advertiser*, March 18, 1837.

There was no claim association in Dane county comparable to the "Johnson County Claim Association,"²⁴ of Iowa, but there were local associations—Squatters' Protective Societies—which, though lacking the elaborate machinery, were equally efficient in their workings and even more drastic in their measures. Nearly every town had its own loose organization and in practice these organizations coöperated without regard to town lines. The resolutions by which these bodies were governed were all about alike, probably copied in most instances one from another. The Sun Prairie draft is given as a sample:

"At a large and respectable meeting of the inhabitants of Sun Prairie, convened at the house of A. W. Dickenson, March 5, 1845, for the purpose of deliberating upon and making arrangements with regard to their situation as squatters:

'Resolved, That in case any person or persons shall purchase land in this vicinity at the time occupied by claimants; that they shall be disregarded as neighbors, and that no dealings of any kind be had with them. That we will neither lend to them, nor visit them, nor act with them in any capacity whatsoever, nor upon any occasion.

'Resolved, That we will protect each other in the claim of a quarter section, admitting it should embrace no more than forty acres of grove timber.

'Resolved, That in case any person or persons should violate the sense of this meeting and deprive claimants of their just expectations, that we will not fail to rebuke his conduct with such severity as has been common in the settlement of this western country.

'Resolved, That opportunity be given to persons who have entered claims to settle with the claimants, previous to the institution of any other measures.

'Resolved, That we pledge ourselves to be in readiness at the call of each other for the purpose of carrying the above resolution into full effect.

'Resolved, That two registers be appointed to keep a record of all lands claimed in the vicinity, who shall receive twelve and a half cents for every record made. Whereupon, Volney Moore and Russel T. Bentley were appointed registers.

²⁴ *Claim Association of Johnson County, Iowa*, by B. F. Shambaugh.

'*Resolved*, That it be incumbent on every claimant, to enter his claim with one of the above registers, and that all such persons be recognized as members of this association.

'*Resolved*, That all persons desirous of this association, shall enter their names on the book of the register.

'*Resolved*, That the registers be authorized to call a meeting of the people when they shall deem it expedient.

'*Resolved*, That the proceedings of this meeting be signed by the Chairman and Secretary, and published in the *Madison Express*."

A. W. DICKENSON,
Secretary.²⁵

WILLIAM LARABEE,
Chairman.

Something of the spirit in which these protective associations were made and supported is shown in the case of Mrs. Eben Peck, who was one of the first women to settle in Madison. It was in such instances as this, that is where the buyer made his purchase and at once left the vicinity that he had some chance to "win out," though he must make speedy transactions if he hoped to sell to an "innocent purchaser" since the news of such enterprises travelled rapidly and few actual settlers cared to face the injured squatter and his neighbors.²⁶

The usual mode of procedure in case a claim was bought by a "land pirate" was to visit the purchaser in case he were not too far distant, taking along a justice of the peace armed with a "warranty" deed ready for the offender's signature, which would constitute his conveyance of the land in question to the aggrieved squatter; the justice would then acknowledge the instrument. It was not unusual for the members of this com-

²⁵ *Madison Express*, March 20, 1845.

²⁶ "Mrs. E. Peck, now residing at Baraboo, Sauk county, made a claim upon an eighty acre tract, by breaking up some forty acres and making other improvements and was laying up the money as fast as she possibly could for entering it, when she found her anticipations blasted by learning that a fiend in human shape, by the name of Chancy Brown, had entered the tract knowing full well at the time that he was robbing a poor widow woman and her children of their just right. We would caution all persons about purchasing the E ½ of SE ¼ 36, 12, 6, as the citizens of that vicinity will never suffer any person to take and keep possession of said tract of land to the injury of Mrs. Peck. We understand that Mr. Brown resides at Whitewater, Walworth county, Wisconsin."—*Madison Express*, July 29, 1847.

mittee to carry guns and ropes and to indulge in remarks calculated to stimulate the claim-jumper in his tendency toward a speedy and amicable settlement. Very rarely did he resist rigorously, but once in a while it required heroic measures to overbalance his greed. The story is told of one "jumper" who resisted, and addressed the committee in irreverent terms, daring them to do him physical injury and threatening to bring the strong arm of the law down violently upon their heads. The committee exhausted their verbal arguments in vain, then putting a rope around the waist of the culprit, led him to a pond, cut a hole in the ice, and immersed him. He was soon drawn out, but being still in a combative and profane frame of mind, was treated to another ducking and on his second coming out was unable to continue his side of the debate, so the negative was declared closed, and after returning to the house the dripping defender of that side set his signature to the papers and with uplifted right hand swore that it was his "voluntary act and deed."²⁷ The squatter usually agreed to refund the money advanced by the "jumper," but custom allowed him to take his time to it and no interest was paid.²⁸

Thus in true western style the Wisconsin farmers enforced their own laws and fought their own battles. The justice who presided at their trials and rendered their decisions may have been lacking in knowledge of law, but he understood the men and the times which he represented. He tried to do the right as he saw it; he lived up to all the light he had, and having satisfied his contemporaries, history can not call him to account for his methods or convict him for results obtained.

It can readily be seen from the foregoing that the amount of land sold and the amount actually settled during a given period bear no definite relation one to the other, even when the amount bought by speculators is known and considered.²⁹ However, it is of some consequence to note the sales before and after the crash of 1837. The following table is for the state of Wisconsin as it appears in the records of the land office:³⁰

²⁷This is partly told in the *History of Dane County*, but I learned it from an old lady who lived near the scene, and was acquainted with the circumstances.

²⁸Letter from Mr. Robert Steele.

²⁹The preemption laws of the few years preceding 1841 had much the same effect, though not so marked as that of 1841.

³⁰*Senate Docs.*, 26th Cong., 2d Session, Vol. III., No. 61.

Year.	Number of acres sold.	Amount re- ceived for same.
1836	646,138	\$808,932
1837	178,753	222,479
1838	87,256	100,416
1839	650,722	819,900

It is seen from this record of sales that the amount of land purchased in 1839 was practically the same as in 1836, but a comparison of the population of the state at these dates gives some idea of the character of the sales. The business failures of 1837 evidently did not result in an immediate exodus to the West as the year 1838 shows but little more than an eighth of the land sales of 1836. By 1839 the sales had passed all former records. This is only reasonable as it takes time to overcome the reluctance to move, to adjust old accounts, or even to make arrangements for leaving them unadjusted. A reporter in speaking of the stir of home seekers in mid-winter 1839 says, "The public sales commenced in this town on Monday last, and during the week have averaged from twenty to thirty thousand dollars per day. There has been no competition in the purchase, the settlers adjusting their disputes by arbitration, the capitalists finding it more to their interest to lend money than to bid for the lands. We believe no lands have yet been bought upon speculation, and that consequently, a great portion of the best lands in the district will still be open for the emigrant the present summer."³¹ We have, then, a statement of an economic cause for the partial cessation of land speculation in the fabulous rate of interest reached during this early period.³²

³¹ *Milwaukee Advertiser*, February 23, 1839.

³² Speculation had, however, been a serious question: "The extent to which speculators have taken up the new lands in the western county is almost beyond belief . . . speculators have visited every part of the country where lands were in the market . . . and taken up vacant lands wherever they are to be found."

"The circular of the secretary of the treasury requiring the public lands to be paid for in specie has had some effect in checking the movements of the speculators, many of whom have found it a serious impediment to their views, and are consequently unmeasured in their expressions of indignation . . . the emigration to this country would have been greater than even it is now had it not been for the speculators, who take up all the good lands as early

That land speculation had a bad effect on agriculture needs very little proof, as the holding of raw land in large quantities may be said to be *per se* a drag on enterprise. Perhaps it is not a monopoly, as Mr. Lapham calls it,³³ but nevertheless, it has many of the attendant evils of a monopoly. Greedy as were the statesmen and other wealthy men who invested their money in western land during the palmy days of 1836, the very fact that they were unable to form anything approaching a monopoly in land rendered them almost as helpless as their unfortunate friends whose capital went down in mercantile disasters of the older states. As noted elsewhere, it is impossible to tell from the records much about the sums realized by these large holders when they finally parted with their land. The greater share of it was held by firms of several members and the number of quit-claim deeds with "consideration one dollar" fill many pages of the register's books. Nor is this all the difficulty: the most of these firms owned land in different counties and even different states, and very frequently transfers were made of one-fourth, or one-tenth, or even one-nineteenth of these widely scattered acres, and exchanges of various kinds of property for land again complicate matters hopelessly. Occasionally where the sale was made directly to a bona fide purchaser previously to about 1850, the price was little more than the original figure—one and a quarter dollars.³⁴

as they come into the market, and hold them at a higher price than the emigrant is willing to pay. In consequence of this, numbers of the new settlers pass beyond the boundary of lands in the market and become squatters."—*Belmont Gazette*, Nov. 2, 1836.

"The rage for speculation in wild lands is a great impediment to agriculture. Men come to this country to make money by *speculating*, not by pursuing a course of tilling the fertile soil, of which they become the temporary proprietors, and which soon passes into the hands of others who are disposed to sell out at an advance. Hence the low state of the agricultural art everywhere to be seen in this state [Michigan] and until all the public lands are sold we despair of seeing even a beginning to a regular system of cultivation."—*Dubuque Visitor*, Nov. 9, 1836.

³³Lapham's *Wisconsin*, p. 220.

³⁴"Lands have been entered in this country at one dollar and twenty-five cents per acre, and after paying taxes on them for years their owners have sold them for one dollar per acre to avoid further taxation. Show us a non-resident who has made much money speculating in western land, and we will show you a rare bird, more rare by far than a successful gold hunter. . . . Large investments in land always defeat their own object. . . . We need no national reform to punish speculators. . . . The only way in which anything can be made by buying western lands is, to locate in small tracts remote from each

Whether the allegation that the settlers imposed undue taxes on the non-resident landowner is true or false, it is clear that they had no legal right to do so; yet it may well have happened that unimproved land was listed by assessors as high as improved land, and the non-resident in that case would pay a rate somewhat above the average.

The assessors and members of the boards of equalization were themselves residents, and it is safe to infer that they taxed the non-resident, while the latter was viewed as a speculator, as much as the law and public sentiment would allow.³⁵

The only possible means by which a speculator could dispose of any quantity of his land until about 1850, when desirable government land began to be scarce, was to offer some inducement to the purchaser better than a cash sale at a dollar and a quarter, and this was attempted in many ways other than actually cutting the price. The most usual inducement was an offer to sell on time which to the numberless home seekers without means was a strong point, but not a conclusive one while the opportunity to "squat" on vacant land remained. Another expedient of the poor speculator was to make some sort of improvement to tempt the prospective purchaser; a house of some sort was put up, or a few acres of breaking was done. The latter improvement was of particular consequence to those arriving in the spring with barely time for planting corn and potatoes, or sowing a little buckwheat. But breaking new land was a big bill of expense at best and a man with his money invested in unsalable land could hardly afford to put much more into improvements.³⁶ Sometimes the large land-holder resorted to the auction as a means of making sales. In 1839 one Nicholas³⁷ of Baltimore advertised many hundred acres to be sold in this manner at Madison on June 4, 1840, but there seems to be no record that

other so as not to interfere in the general settlement, and even then the settlers skin the speculator out of his profits by taxation."—*Madison Argus*, October 22, 1850.

³⁵These inferences are drawn from actual facts which the writer has known personally in O'Brien county, Iowa, where unimproved land was listed at the same rate as the rest, and no attention paid to complaints.

³⁶This scattering testimony is from conversations with old settlers, and although it is not as specific as one could wish, the fact that speculators in the early days of Wisconsin suffered more from their cupidity than they caused others to suffer seems fairly well established.

³⁷*Wisconsin Enquirer*, November 2, 1839.

the sale⁴ took place, and this in itself is evidence that such speculation at that time was not an enviable business, for there was no chance that the land could be sold for anything above cost before the date set for the sale.

Congress was not quite oblivious to the evils of land speculation and on January 8, 1841, a bill was introduced in the senate to limit the sales to 320 acres at one dollar and twenty-five cents per acre, the purchaser at the time to be worth not exceeding one thousand dollars.³⁸ It probably was not intended that this bill should get very far. The limitation as to size of purchase was reasonable enough, but it is hard to see how the second stipulation could be enforced. Again in 1848 the senate made a like feint at limitation of the size of purchases, one hundred sixty acres being the proposed maximum. Whether these measures were in jest or in earnest, there was no limit set until the question had ceased to be a vital one in southern Wisconsin.

Another means of getting hold of land was the military land warrant, and many such warrants were used. They began to appear in great numbers about the year 1848, that is, at the close of the Mexican war. From that time till the land was all taken this scrip played a large rôle in acquiring patents. The men fortunate enough to hold the warrants were at a decided advantage over the average buyer. They were good for eighty acres, but until 1851, were not transferable. Here was a serious proposition, and owing to pressure from the holders of warrants who were not desirous of taking the land for themselves, and much importunity on the part of anxious buyers, congress on December 11, 1851, voted that warrants should thereafter be assignable. Much complaint was manifested in the West over this action, as it was believed to be a move toward speculation instead of away from it, such as congress had at times pretended to favor.³⁹ Soon after this act, land warrants for eighty-acre entries in Wisconsin were quoted in New York along with stocks and bonds, and as land was at this time beginning to rise perceptibly in value, the warrants often sold for two hundred, or two hundred fifty dollars.

It remains to speak of one other method of gaining possession of land, viz.:—buying it of the state. As in older western states

³⁸ *Senate Documents*, 2d Session, 26th Congress, Vol. 11.

³⁹ *Madison Express*, January 1, 1852.

section sixteen of every township was school land.⁴⁰ Wisconsin received the half-million-acre grant of land given to new states for internal improvement by act of congress, September 4, 1841, some of which was located in Dane county. The act was modified May 29, 1848, and such land as remained unsold in this tract was added to the school land; there was also some land within the county belonging to the state university and a considerable amount of swamp land which was given to the state in 1851.⁴¹ Under this grant, the object of which was to forward the drainage of swamps, the building of levees, roads through swamps, and the like, the state of Wisconsin claimed over four million acres and actually received more than three-fourths of that amount. The Swamp Act provided for an indemnity grant in case the swamps had been sold as arable land before the transfer was made to the state. The surveyors had listed each separate forty as *arable* or *swamp*, and it was on this basis that Wisconsin made her claim. As a matter of fact, much of the land listed as swamp was desirable, even more so than the average, and many pieces were taken by the earliest settlers.⁴² Thus under the indemnity proviso the state claimed a much larger amount of land than the swamp remaining unsold. It was several years before the legislature undertook the necessary work of locating these scattered fragments and as a result there is a very great deal of land on the list of "State Swamp Lands" which is among the driest of the state.⁴³ Provision was made for cash indemnity in case lands were not available and this has led to long and tedious bickerings which are not entirely settled yet. Altogether the state owned 30,800 acres of land in Dane county, 16,480 acres of which was nominally swamp, the balance being school and university land.

The swamp land was sold at a dollar and a quarter per acre, some of it not being taken until 1896. The school land was appraised in 1850 at prices varying from ten cents to ten dollars

⁴⁰In states organized later than 1848, the 36th section was also school land.

⁴¹Act of congress, September 28, 1851.

⁴²This is partly explained by the fear of the early settlers that water could not be had on the upland, but the surveyors were evidently careless in their classification.

⁴³Indemnity land could be had wherever there was government land remaining at one dollar twenty-five cents per acre.

per acre and was at once put upon the market.⁴⁴ The money received for this land was to constitute a permanent fund, hence it was even more desirable to leave it in the form of good security than to have it paid in cash. This being the case, the sales were made on remarkably easy terms, one-tenth down and the balance on thirty years' time at seven per cent. interest. By this means many a poor man was enabled to get a firm grip on a farm, and in not a few instances these lands are still in the hands of the original purchasers. The other state land was sold on twenty years' time at ten per cent. interest, and even this was a desirable bargain owing to the low price per acre.

With the above facts before us it is easy to comprehend the force of the remarks already made as to the difficulty in making a fortune in holding land for a rise; there were too many alternatives open to the buyer, and with all his hardships he was seldom at the mercy of the land shark until after the last of the desirable public land had become private property. It was during the early '50's that the greater part of the state land was sold and it was also at this time that the first considerable rise in the price of land occurred. Had the state during its early history adopted the policy of selling land for what it would bring, there would be a different story to tell in the matter of state finance, but they followed persistently the first determination to offer land at as low a price as possible and in this way encourage immigration, blindly trusting to the generosity of the tax payers to provide all necessary funds for future needs. This as a policy is as unfair as it is inexpedient. It is unfair because only a limited number of settlers can profit by the low prices; it is inexpedient because, as seen in the sequel, the men who get land for a tenth of its real value are not willing to give as freely as they have received when contributions are asked for public expenditures.

⁴⁴Wisconsin *Assembly Journal*, 1850.

CHAPTER IV.

SELECTION OF LAND.

Whether or not the first settlers choose the best land is a question which has long been in dispute, and unless other localities can furnish more conclusive evidence than is found in the history of Dane county the question is likely to remain without a definite answer. However, there are some fairly clear lessons to be learned in the varying choice of land by different classes of people at the same time, and the changes in this respect from one time to another. Without doubt the early farmers were "economic men" to the extent that they intended to take, other things being equal, the most productive land available; but it must not be forgotten that production meant to them, just as it does to an economist, the return for outlay; or it may not be overstating the case to say they were looking for the greatest net gain. This net gain is by no means a simple homogeneous quantity, and moreover, it must be reckoned for a term of years. The farming class is usually credited with only moderate long-sightedness, and in the case of the pioneers they may well be forgiven if they were more concerned for the welfare of their immediate families than for remote posterity. They took the land that promised in their judgment, the greatest reward within the near future; but in the matter of judgment there was a great lack of uniformity.

In the first place the land near the capital was taken with little regard to quality, and in the main this was a wise move, though not to the extent that might be supposed. Outside of the city limits the farms of the town of Madison will not average as high in price at the present time as those of several other towns which lie at the maximum distance from a market. Contrary to some of the histories of Dane county the first entries were not those

made by the speculators in 1836 with a view to owning corner lots in the law-making city. From the entry-book it is seen that a small quantity of land was sold in 1835. A Mr. Rowan entered thirty-five acres on the east side of Lake Monona and settled upon it, and several sections were bought the same year by speculators. In 1836 the land around the Four Lakes was taken, each buyer hoping the capital would be located in his neighborhood, or at any rate that a popular summer resort would grow up on the lake shore, and thus contribute to his prosperity. A few hundred acres along the Wisconsin River were taken by men, who in their mental vision, saw a great commercial center near where Prairie du Sac now stands. Mr. Brigham and others took land near Blue Mounds in hopes of fortunes from digging lead. Thus nothing can be predicated as to the sort of land chosen by the real tiller of the soil until such purchasers began to arrive in 1839 or '40, and little can be known of the motives governing selection after 1854 because the unoccupied land was by that time very scarce.

The difficulties in the way of definite results in this chapter can hardly be exaggerated. In the first place the geological maps are not scrupulously accurate and it cannot always be determined from them whether a particular piece of land is hilly or level, prairie or woods. In the next place there was often a variety of considerations that resulted in a particular selection; perhaps it was a choice between having neighbors or being isolated; perhaps a choice between congenial neighbors and those with whom even conversation was almost impossible. Nearness to a highway, to a river thought to be navigable, even to places where it seemed game would be abundant, turned the scale against odds which would now seem of greater weight; but oftener than either or all of these, the question of securing a convenient supply of wood and water was the controlling influence. Again the settlers "squatted" on the claims until they were compelled to enter them, that is until the land came into the market, and thus the time of entry may or may not show the order in which different claims were taken.

There were innumerable springs in the hilly districts and small streams were numerous.⁴⁵ It was possible to do without flour

⁴⁵A large share of these are dry of late.

until wheat could be grown; in many cases a house could be dispensed with for some months; but in no case could the use of water be foregone while a well was being sunk, and although it may seem that hauling fire-wood a few miles is a matter of no great consequence, the man who knew the West only through the medium of exaggerated reports telling of awful storms and cold, hardly dared risk living more than a stone's throw from fuel.⁴⁶ However, there are some few facts among all this tangled mass which speak out distinctly. That the settlers were almost without exception discriminating in their choice of land is seen by the shape of the farms taken. In the great prairie region where one quarter-section is about like another, the buyer or homesteader almost invariably prefers a farm in as compact shape as possible; but on the patchwork surface of Dane county there was much difference in forties falling within one general class, and as a result the farms present every possible combination of forty acre lots. Often a hundred sixty acres was made up by a row of forties across the section, or not infrequently they cornered only, and occasionally one man would own land entirely surrounding some forty or eighty which was rejected on account of being too swampy or too hilly. The first settlers having once made these selections, the later arrivals were compelled to make purchases equally irregular in contour. Some of these inconvenient farms have since been made more compact by exchanges, but irregularity is still the rule.⁴⁷

Of the swamp land approximately half was taken by choice before the act of 1851 gave it to the state, and after that date it sold about as readily as other land until only a small quantity remained.⁴⁸ This was owing to the scantiness of hay to be had on the drier land, also, shallow wells could be made in this low ground affording water for stock or even for house use.

The most interesting and at the same time the hardest questions to answer, are those relating to the choice between prairie and wooded land. In the first place there were so many little

⁴⁶One German when advised to take land out in the open remarked that he expected to carry all the family fire-wood on his back for some years to come and a few rods was far enough.

⁴⁷What has here been said does not apply so much to the prairies.

⁴⁸In eleven towns taken at random, fifty-three per cent. of the swamp land was sold prior to 1851.

groves scattered about the prairies, and so much open land distributed through the woods that a great many settlers were enabled to choose both woods and prairie, or other open land, and have the advantages of wood and water without the disadvantages incident to a farm composed wholly of either woodland or prairie. No doubt this was the wisest choice possible, and as nearly as may be learned from the old settlers, such a choice was made mainly by the New England, New York, and English people, while the Germans, Norwegians, and Irish preferred the woods.

It will be remembered that a considerable part of the oak land of Dane county consisted of "openings" and the choicest of this was, indeed, desirable land; it was easily plowed, and especially while winter wheat was the main dependence, yielded the best returns; plenty of wood was found upon it, and yet the matter of grubbing out stumps was not formidable. Hence those who much preferred prairie to solid timber land still might take the "openings" in preference to either.

The Germans and Norwegians were not at all averse to hilly land, perhaps because they were accustomed to hills at home.⁴⁹ The foreigners were almost without exception afraid of wind storms and for this reason avoided the open. The first three Norwegians to enter claims in the county chose them in the oak land near the northeast corner of the town of Albion. However, the Norwegians were keen in the choice of land as in other things; they soon learned to take the oak openings in preference to the more thickly wooded land, while many of them settled on the border of the prairie.⁵⁰ It was the Ohio farmer who feared the prairies least; he had seen something of them before and had learned by experience the comparative ease of subduing such soil in contrast to the slow and laborious task of ridding the land of brush and stumps. "Wheeler prairie" and "Stoner prairie" were named in honor of the first settlers, both from Ohio; and "Tobacco prairie" in Rock county was also settled by Ohio farmers. In the north part of Dane county is "Dane prairie" much the largest prairie within the county, covering an area equal in size to

⁴⁹*History of Dane County*, p. 562, article by H. A. Tenney.

⁵⁰From statements made by Professor J. Q. Emery of Albion, Wis., who has been familiar with the Norwegians of Dane county almost from the first.

three towns, and along the west edge of this we find the "Ohio settlement."

It is in the settlement of this prairie, if at all, that general preferences can be traced. The records of land sales throw very little light on the subject, the reasons for which are already enumerated. It is therefore necessary to rely on other data, which fortunately are abundant and conclusive. Here as elsewhere the woods were taken first, it being nearly all occupied before any considerable part of the prairie was settled.⁵¹ One emigrant who had traversed the length of the prairie—perhaps twenty miles—with his ox team, was asked if he thought the dreary waste would ever be inhabited, and answered; "Yes, but not in your day or mine," yet the good man lived to see farms on the prairie selling for seventy-five dollars per acre, while the wood farms were worth not over one-half or two-thirds that amount. The last and strongest objection to living on the prairie was the difficulty of digging a well. This was before the time of drilling wells, and the farmers, with only powder and pick found it almost impossible to go any distance into the solid magnesian limestone with which this tract is underlaid, yet there was little if any water above it. The demand for more wheat land made a marked advance in the early '50's. The price of wheat, taking a boom at this time, overcame nearly all the prejudice to any land that could possibly produce that cereal. During the winter of 1853-4 many attempts were made to dig wells on the prairie, some of them being sunk to a depth of seventy-five or eighty feet; but no water of any consequence was found. At the same time wheat had reached the remarkable price of two dollars a bushel, and nothing further was needed to bring a general rush of wheat growers to the prairie; even the question of drinking-water was of secondary importance, and in not a few cases all the water used was hauled from Lodi, a distance of five miles or more. It was the restless Yankee who left his little cabin and clearing to begin again on the inhospitable prairie. These "Yankees" were either directly from New England or were those already initiated to pioneer life in western New York or Ohio. The German was the last to

⁵¹The account of the settlement of Dane prairie is taken from statements of old settlers, principally by Messrs. Chas. Loper, Robert Steele, Jas. Steele and Amos Chase, all of whom have lived on or near Dane prairie for half a century or more.

leave the shelter of the woods, as is seen by the solid German settlement of Roxbury and the west part of Dane, one of the most thickly wooded districts of the county. It is true that the Germans have long since learned to appreciate the prairie, but it was after the first and hardest problems had been solved. As to the English and Scotch it may be said that they, like the Norwegians, were rapidly Americanized and were soon awake to the advantages of open land. But for staying qualities the German and the Norwegian take front rank. Without any exception they have done better than merely to hold their own in every locality where they have settled, while the Yankees, English, and Scotch have been carried on to become pioneers again, or have quit farming altogether and moved to the city.

Let us not be misunderstood. There was no class of settlers who at first preferred the bleak prairie; very little of the prairie other than mere fringes was taken till late in the '40's.⁵² Sticking so closely to the woods was a corollary to the proposition that wheat was the only crop to be raised. Wheat did yield better on the stiff clays of the woods than in the more friable soils of the openings and prairies, and it was the general belief that clover and timothy, which began to relieve the monotony of wheat growing, would also succeed better on the same kind of soil.⁵³ A traveller, in 1842, gives a glimpse of pioneer life, and incidentally adds a little testimony to the statement that New Englanders were among the first who settled the prairie.⁵⁴ The problems to

⁵²The causes for this, both true and imaginary, are set forth in contemporaneous writings: "Some of them [i. e., roads] lead through extensive prairies where timber is scarce, but we apprehend that even these large prairies will be found more available than many suppose. . . . As we were crossing one of these prairies a short time since we found a man in the midst of it, quite out of sight of land, as we say, building a fence and going ahead with a farm. He got the rails ready split, four miles distant, at ten dollars per thousand."—*Madison Argus*, July 28, 1846.

⁵³Pat. Office Rept., *Agriculture*, 1852-53, Part II, p. 152.

⁵⁴"Dined at the house of a thriving New Englander, who from small beginnings, is now the proprietor of five thousand acres of prairie land; he has enclosed several fields of Indian corn with ditches instead of rails—answering the double purpose of staying the prairie fire and keeping off cattle; he had sunk a well and built a stable, barn, and hogpen, on a large scale, and like a wise man had lived up to this time in a simple log-and-mud cabin. I am really at a loss to know how the good people of this country—this out-of-the-way place—find all the good things they set before travellers, especially the New Englanders."—*Life in the West*, p. 260.

⁵⁵"The prairies are of two kinds, the dry and the wet. The dry is arable land. The wet prairies are called sloughs or bottom land; they are not considered

be solved by the farmer who took prairie land,⁵⁵ were in some ways more perplexing than those of making farms in the woods, and some of these were of a nature not likely to suggest themselves to one wholly unacquainted with the work of subduing raw prairie. The woodland could be plowed at any time of year when the weather permitted, and the settler could utilize all his spare moments in clearing and breaking for the next season's sowing. But not so with the prairie. Even if he should succeed, by an almost infinite expenditure of strength, in breaking the sod late in the summer, he could reap little except disappointment the following year. Again if he was too anxious, and did the breaking very early in the spring, the results were only less unsatisfactory. The mistake of breaking too deep was also a common one. To get good results prairie should be turned in thin furrows during the early summer and left to rot without the interference of a "sod crop" for the remainder of the season. All this seems simple to the western-bred farmer, but was a hopeless series of conundrums to those meeting these conditions anew. Fortunate indeed was the man who felt the need of information and experience.⁵⁶

One of the most pitiful pleas in favor of woodland over prairie appeared in an agricultural paper in 1851, just about the end of the period when there was actually free choice between the two. The matter of health is very often mentioned as a reason for taking one or the other kind of land. Another writer tried to get at the matter statistically and found that among twenty-seven families who moved to the prairie, there was a certain number of deaths, while among a like number of dwellers in the woods for the same period of time, the number of deaths was not so large. There are no data on this question on which to base conclusions, but it is generally agreed that fever and ague, the great bane of pioneer life, flourishes best in a damp country where a great amount of vegetable matter is undergoing decomposition.

fit for tillage [and are] valued only as a resort for cutting hay, or as a range for cattle. All land of this character [i. e., both the wet and dry prairie] is generally avoided in the selection or purchase of land."—*Madison Express*, April 16, 1846.

⁵⁶"When I commenced making a farm on the prairie I found myself engaged in a task by no means without its difficulties and perplexities. Whatever I had learned of farming in the East had to be principally learned over again here—I looked in vain for well tested and enlightened experiments—what was the best season of the year in which to break prairie; how deep should it be broken?"—*Madison Express*, May 19, 1841.

Be this as it may, the prairies of Wisconsin have long been exonerated from the charge of unhealthfulness; and the modest woods of this section of the state can hardly be termed dark or damp forests. Nevertheless the great amount of surface water, often stagnant, was the cause of much sickness in the early days of Wisconsin settlement.⁵⁷

If it appears that the foregoing is a vague treatment of the manner and motives of land selection it can be answered only by

"It is true the prairie mania has ever prevailed among the eastern farmers coming to settle amid the West. This is the result of a fancied convenience among new settlers and a wish to gratify that thirst for novelty which is inherent in the minds of those who have been reared among the hills and valleys of the New England and Middle states, where nature in her prairie beauty has never appeared. But that prepossession in favor of prairie farms is rapidly yielding to the formation of a more rational conclusion. The absence of many of the common conveniences of life which are enjoyed in the timber—the want of health and the failure of crops from year to year are obstacles in the path of prosperity which exist upon the prairie and which can never be wholly surmounted. These will henceforth prove a barrier to their settlement, and will have a tendency to direct emigration to a forest home. The angry winter wind which sweeps over their heads in its course for hundreds of miles, unbroken by any obstacle, save the slight undulations upon the bosom of the prairie, where neither tree nor shrub appears to shelter the weary traveller from the keenness of the blast which often threatens him with immediate destruction,—the scorching rays of the summer sun maddening and destroying the brain, and other manifestations in nature, all speak to the settler, in language not to be misunderstood, of disease and death in its most horrible form. There disease in every form destructive to vegetable life is stalking abroad and ever and anon lays its withering grasp upon the fruits of the toil of the laboring man and deprives families and neighborhoods of the means of subsistence, leaving poverty and destitution to prey upon its victims, until another year shall have rolled its sluggish course, bringing but too often in its train the same fearful consequences. This is not an overwrought picture."—*Wisconsin Farmer*, III, 145.

Preference for woodland lingered till long after wheat ceased to be the principal crop: "Upon the whole it is our opinion that, everything considered, the oak openings are the best lands for a farmer of moderate means. These lands seem to be less rich in the vegetable producing elements than the other two [timber and prairies] but such is not the fact as demonstrated by experience. The soil of the oak openings is of a lighter color, but it produces the finest crops of cereals, including corn and also esculent roots. It plows very kindly, is never miry like the prairie, where the reapers have sometimes become useless in wet seasons because they could not be worked in deep mud. The openings produce as much to the acre, and of a plumper, heavier grain; manure works a more permanent benefit; they raise heavier crops of clover and other grasses and the use of plaster is attended with wonderful effect, frequently doubling the crop of hay; orchards thrive better; they supply fuel and fencing material; also stones for cellars, wells, and handsome imperishable fences.

"All these advantages mentioned in connection with oak openings also belong to the timbered section and the latter have the further advantage that, once cleared, they do not, like the openings, send forth a crop of useless and tangled grubs which are very expensive to eradicate." Thus prairie is the poorest land.—*Trans. State Agr'l Soc.*, IX, 405.

recurring, at the risk of tedious reiteration, to the endless reasons, and almost lack of reason, which attend the selection of different land by different people; and in addition, that the writer had no thesis to maintain or theory to prove. In answer to the question "Did the first settlers take the best land?" no sweeping answer can be given. The greatest mistake was no doubt in rejecting the prairies so long; quick returns—and this was of vital importance in most cases—were more easily had here, where a little skill in the use of the breaking plow enabled a man to turn virgin soil into cultivated fields at the rate of two or three acres a day, while in the woods not a quarter of the same results could be had. The patience and toil of those who cleared up the woodland was eventually rewarded, and where this land is not too hilly or stony, it has proved to be excellent in wearing qualities, though on an average it must still rank below the prairies, as the latter have always excelled in the production of Indian corn. Many of the old pioneers who still remain look with chagrin from their rough farms, worth fifty dollars per acre, to the smooth, inviting fields of their prairie neighbors, worth fifty per cent. more, and recall the time when they rejected the latter in favor of the former. Yet no doubt they were temporarily better off making the choice they did than had they undertaken the greater task with the possibility of greater gain in the long run, and "for many of them there was no long run." They took the land they thought was best, and for a period it was. On an average the land which was best ultimately was not taken first, but this was due largely to the particular class of settlers who took it.⁵⁸

⁵⁸Since writing the above, I have received a letter from Mr. Robert Steele of Lodi, Wis., which corroborates almost all the statements made in the chapter respecting the choice of land by the different settlers. He adds that the Germans of the northwest part of the county, who were mostly from the Rhine country, hoped to raise grapes on the sunny hillsides of Roxbury. Some of them did so, and made several thousand gallons of wine per year for a brief period. Mr. Steele thinks, however, contrary to one of the quotations above, that there was a general tendency for immigrants to choose land resembling that of their former homes, an example of which is the location of the Swiss in the hilly country to the southwest of Dane county.

CHAPTER V.

DIFFICULTIES OF EARLY FARMING.

The struggles and hardships coincident with pioneer life are familiar topics, yet each new country has its own peculiar difficulties. In Dane county the first formidable drawbacks were those of markets and prices. Even the most ingenious and economical pioneer had to depend to a considerable extent on eastern supplies. Flour and pork were the standard articles of food, and as they had to be brought up the Mississippi river or from New York or Ohio, the prices were exorbitant. The first demand for any considerable amount of provisions in southern Wisconsin was for supplying the needs of the lead miners, and they paid dearly for their living; one man speaks of giving four thousand pounds of mineral for a barrel of flour.⁵⁹

In the spring of 1837 a party of land prospectors paid to Mrs. Masters of Jefferson one dollar per peck for oats; at the same time pork was reported to be worth twenty-one dollars per barrel, and flour forty-one dollars; a cow was worth forty dollars, and a yoke of oxen one hundred fifty dollars.⁶⁰

In Milwaukee, corn was quoted at two and a half dollars per bushel, eggs as high as one and a half dollars a dozen, and butter at forty-five and fifty cents per pound.⁶¹ This certainly was a rare chance for a limited number of farmers to grow rich rapidly; but few farmers were here at all and they for the most part were slow in getting any produce on the market. Such lines as the following must, however, have had a stimulating effect on all who were getting their farming operations under way: "Hundreds

⁵⁹ *Wis. Hist. Coll.*, II, 335.

⁶⁰ *Ibid.*, X, 425.

⁶¹ *Milwaukee Advertiser*, February 25, 1837.

of barrels of pork are annually imported from below on account of a lack of farmers to supply the great demand for this article from the mines."⁶²

Some idea of the manner of making a home in the wilderness may be gathered from the reminiscences of an old Rock county pioneer: "During the summer of '37 I made a claim on the bank of the Rock river three miles above Jefferson. In December following I took an ax, a ham of pork, and a blanket, walked down to Jefferson, bought a few loaves of bread of E. G. Darling, also borrowed a boat of him—went up to my claim to make the necessary improvements to hold it until spring.

"I worked upon my claim for four weeks, chopping trees, building fences, etc. Having made the necessary improvements on my claim, I went back to Rock river to work until spring. During the winter I picked enough cat-tails to make me a bed. Also caught and salted a keg of fish, bought a yoke of oxen and prepared to go onto my claim in the spring. In April, '38, I borrowed the hind wheels of a wagon, put in a temporary tongue and box, loaded up my shanty outfit, drove to Ft. Atkinson and crossed the river on the ferry, thence to Jefferson; again ferried across, cut my own road through the timber, three miles, and reached my claim. The next day I took the wagon on the boat borrowed of Mr. Darling and returned it to Bark river running the distance of twenty miles, and returned to my farm the next day ready for farming. I cleared about two acres, made a harrow with wooden teeth, and planted the land with corn and potatoes. I paid four dollars a bushel for seed corn to plant. The corn not coming up the first time, I replanted June 3, paying sixpence an ear for the seed. Raised a splendid crop of corn and potatoes. The nearest grist mill was at Beloit and several Jefferson people carried their corn there to grind. One of my neighbors, Mr. Britton, dug a hole in an oak stump for a mortar and pounded his corn to supply a large family. Having raised something to live on and having built comfortable houses to live in, we all turned our attention to building roads through the timber. A territorial road was opened from Milwaukee to Madison by the United States Government in 1838 and '39—at this time I went to Milwaukee for a load of pro-

⁶² *Wisconsin Enquirer*, November 2, 1839.

visions. It cost two dollars per hundred weight to haul goods from Milwaukee to Bark River Mill."⁶³

A still earlier settler relates experiences much the same.⁶⁴

A writer in the Watertown Republic of July 3d, 1889, speaks of making a sled by hand at Milwaukee, paying sixty dollars for three barrels of flour, eighty dollars for two barrels of pork, and with two yoke of oxen as the team starting westward for Watertown. Many instances are recorded of five dollars a barrel being paid for hauling flour from Milwaukee to Madison and it is little wonder when two yoke of cattle were required for moving ten or twelve hundred weight of goods. Before the road above mentioned was laid out each teamster went where he pleased and he usually tried a new route "knowing that a change must necessarily be an improvement."

The newcomers were almost uniformly without capital in any form beyond a team of oxen, a wagon, and a few household articles. Many a determined home-seeker, discouraged by business failure or low wages in the east came to Wisconsin with barely enough money to pay his passage, and after selecting a farm and filing preëmption papers, or quite as often, engaging some friendly neighbor to use his influence in preventing its being "jumped," started for the pineries and hired out as a chopper thus earning enough to pay for a forty or two. These experiences were not wholly uneventful. One Vermont youth after walking a considerable share of the distance from Milwaukee to Dane county, locating his claim, and making his way to a northern pinery was told by the lumberman that he already had more help than he wanted. Nothing daunted he resolved on appropriating some of the free timber himself and set to work making a raft to take to Dubuque in the spring in hopes of finding a

⁶³Quoted with some slight changes for the sake of brevity from *Janesville Gazette*, June 24, 1886, *Wis. Local Hist. Coll.*, XVIII.

⁶⁴"My father had raised the body of a hewn log house, which was considered very nice then. His first thought was to finish that so we would be more comfortable. The boards for the floor and shingles for the roof had to be gotten out by hand, but it was at last accomplished, and some time in January we moved into it. The next thought was to obtain seed for spring sowing, so my father hewed out timber for building purposes, rafted it down the river to Janesville where he sold it and bought potatoes, paying \$5 per bushel, and beans the same. That of course did not mean many to eat, but as soon as they could grow we had plenty."—*Watertown Republic*, June 26, 1889, *Wis. Local Hist. Coll.*, 11.

market. All went well till on his way down the Wisconsin, afloat with his entire stock of goods, the clumsy raft went to pieces in the Baraboo rapids and was at once converted into worthless driftwood. This would seem to be enough to cure the western fever in almost any case, but not so this time. He retraced his steps to his native state, married a wife of equal pluck, and with a few borrowed dollars again set out for Wisconsin and the claim he had located, found it awaiting him, and he is still the owner of it together with many contiguous acres. At the risk of wandering a little from the subject we must follow this man a stage or two farther. He served three years in a Wisconsin regiment in the Civil War, homesteaded and preëmpted half or three quarters of a section in Dakota when the first general rush to that territory occurred, and in 1900, forty-nine years after his first visit to Wisconsin, spent a summer in Cuba grubbing out brush and planting fruit, and already has bearing bananas in the island. This is a sample of the stuff that the genuine American pioneer was made of.

The importance of the little markets at the mines and pineries was greatly overestimated. "For many years to come the surplus produce of the settlers will find a ready and profitable market at the Wisconsin pineries, Ft. Winnebago, and other points on the river."⁶⁵

By the time the first farmers were fairly settled and had succeeded in producing a little more plain food-stuff than was needed for family use, the much-vaunted "home market" bubble had burst. In the early '40's butter sold at the country stores as low as five, or even three cents a pound. Wheat was worth from thirty to fifty cents in Milwaukee and the cost of hauling it there was equal to half or two-thirds of its value. Hogs although few, as we now view it, were a drug on the market, and after being dressed were often hauled forty or sixty miles to the pineries to be bartered for shingles, and in many cases the load of meat would no more than pay for a load of shingles.⁶⁶ Pork was quoted at two and three cents, beef about the same, and even at these figures the payment was seldom made in cash, there being almost no cash in the country, and that little going for taxes and postage stamps.

⁶⁵*Wisconsin Enquirer*, November 14, 1840.

⁶⁶I stayed one rainy day the summer of 1901 in a house in Dane county which still had shingles on the roof obtained in this way—it leaked.

Barter was the only alternative to a complete stoppage of trade, and in consequence it was used as thoroughly as though money had no place in the economy of that time. Butter, eggs, turnips, and what not, were peddled around Madison by farmers who had brought them a distance of twenty miles only to find that the discouraged storekeeper would take no more produce at any price. And the townspeople who did take it often paid with an order on the storekeeper, and this paper usually had to be approved by the storekeeper before it was accepted by the truck vender. These were indeed the days of small things.

Few of the early settlers had any draught animal besides the ox, and not infrequently even this was wanting. The first man to till the soil in the town of Vermont had no equipment other than a spade and a hoe.⁶⁷ Occasionally cows were yoked to the wagon or the plow, and only once in a long while was a farmer found who owned a horse. All things considered the ox was the most suitable for pioneer motive power. He was slow, but not so helpless in a swamp, not so dainty in the matter of food and drink, not so sensitive to cold or wet, or so dependent upon three regular meals a day as the horse. Until experience taught them better the pioneers used a breaking plow twenty, thirty, even thirty-six inches wide, and for moving these ponderous ditching machines, which must be run at a great depth in order to keep them steady, much power was required and the movement was necessarily slow. For this work some six or eight yoke of cattle with two or three drivers were required. Often the oxen were fed only grass which they must gather for themselves at night. At noon but a short pause was made to allow the men to eat their lunch, it being too great a task to yoke up a herd of unwilling half-broken oxen more than once a day. In case the ox and his owner were both new at the business progress was slow indeed, and it is a wonder that any headway at all was made. A concrete example of this will illustrate the seriousness of the problem. An Englishman, two years in this country, and wholly without experience in working cattle, entered a piece of land in the northwest part of the county, and bought at the same time a pair of young untrained oxen. At the end of the first season he had plowed five acres of oak openings—"if you could call it plowin'" as he remarked with a grim smile.

⁶⁷*History of Dane County*, 933.

In case the new arrival had no means of doing breaking the first year, he could hire a few furrows turned by paying at the rate of five dollars per acre.⁸⁸ Later the price of breaking fell to two dollars, and two and a half dollars per acre, the former price for prairie, the latter for oak openings or such woodland as could be plowed without the use of the ax and grub-hoe, yet it is agreed that in the manner the work was done, more "openings" than prairie could be plowed in a day.

A lack of suitable implements was a serious inconvenience quite as often as lack of teams. Grain was cut with a sickle, a scythe, a cradle; was bound by hand, threshed with a flail, winnowed by being tossed into the air with a shovel, pounded to flour in a wooden mortar, baked in a rude oven, and the bread eaten without butter.⁸⁹ Men who had never shown a tendency to any description of skilled workmanship turned their hands to a multitude of home manufactures—ax-helves, flour-chests, tables, chairs, beds, baskets, rakes, harrows, rollers; in short those who had once depended on the various members of the community for everything, again became in a great degree independent, but lost their one art, which perhaps was overdeveloped, to gain a primitive knowledge of blacksmithing, carpentry, masonry, healing, hunting, fishing—little wonder that there was not energy and skill left over to make anything more than mediocre farmers. Blacksmithing was perhaps the greatest bug-bear in this category. Until there was promise of sufficient work to enable a man to earn a living at the forge, few cared to set one up, and the stories told of trials in getting blacksmith work done are many and picturesque. As much as they would stand plow-shares were beaten out cold; sometimes they were heated in a fire of chips on the open ground and hammered out on an iron wedge driven into a stump in lieu of an anvil. One man, wishing to give his tired oxen a rest, carried the share of his breaking plow to Madison, had it sharpened, and returned the same day, making the entire round trip of forty miles on foot. Another man after vain attempts to "toggle" his log-chain found that the splices took up too much of the length, so putting the pieces into a grain sack and

⁸⁸*History of Wisconsin*, by W. R. Smith, pp. 121 and 122.

⁸⁹Every item of this may be proved by people who were familiar with that mode of life in Dane county.

taking it across his shoulder he lugged it ten miles to a blacksmith shop.

But the entire lack of a plow was one of the worst misfortunes, though even this was not necessarily fatal to agricultural operations.⁷⁰

Thus the tale goes and might easily fill a volume, but a mere snap shot at these scenes is all that the present work can admit. Let it be remembered, however, that these very conditions, trivial though they may seem, had an important rôle to play in the prosperity and the character-building of the pioneer. It is true that he solved these perplexing problems because of an inborn and inimitable tact, but it is equally true that in the solution itself the frontiersman gained a self-reliance, a mastery of the situation, a tough body, and a clear head—all of which were needed in good time—but that is another story.

⁷⁰"Mr. F. C. Kirkpatrick, who came to the county in 1827, related his first effort at plowing, being the first plowing done in the present limits of Grant county. He had a horse and harness, but nothing in the similitude of a plow. The framework he easily manufactured similar to the frame of a single shovel; through the beam he inserted a pick, commonly called a sinking pick. With this and his one horse he broke about two acres. The two acres produced a bountiful harvest of corn. The corn was taken to Armstrong's mill, near where Dickeyville now stands, and ground, or rather cracked, the cracklings were grated and the gratings made into bread. In those days we went to Galena for our supply of necessities."—*Wis. Local Hist. Coll.*, 13, from *County Gazette* (Grant county).

CHAPTER VI.

THE ONE-CROP PERIOD.

SECTION I—WHEAT.

It will no doubt be objected that there never was in southern Wisconsin a time when one crop was raised so exclusively as to warrant the title given to this chapter. We look back to the tobacco culture of early Virginia, or to the cotton production of the gulf states in ante-bellum days, and unhesitatingly speak of them as one-crop periods. We speak glibly of the old Norfolk four-course system as practiced in England for a century previous to the depression of 1875, yet does anyone suppose that the tobacco growers of Virginia or the cotton planters of the South would have accepted the term "one-crop system" had they been accused of practicing it? Or does any student of English industrial history think that the Norfolk system was followed with such conscious care and precision that one could predict the periodic return of a certain cereal to a particular plot as an astronomer predicts an eclipse of the sun? However, the term "one-crop period" was chosen advisedly and serves the purpose of giving a general idea of the conditions of these different times and places. Likewise, it must not be understood that every other crop was insignificant; yet seen in perspective even at this short range, it appears to the observer that dairying, stock raising, the growing of other grains, were, all combined, but mere incidents in the general business of attempting to grow wheat. That is to say, wheat was the staple; it was the crop produced for the market; the crop from which a money income was expected.⁷¹

⁷¹ Pat. Office Rept., *Agriculture*, II, p. 465.

The reasons for turning attention and energy so exclusively to wheat culture from the first settlement up to about 1870 are too numerous to be stated in a sentence. To begin with, the question as to what crop would flourish in the new country was a grave one. The belief was general that corn could not be raised to advantage. True it was raised by the Indians, but this was a small variety, and was not a sufficient testimony to overcome the preconceived notion that Wisconsin was a little too far north to be reckoned in the corn belt. Or, suppose corn could be raised in large quantities, it was too bulky and too cheap to stand transportation a thousand miles to market. This latter argument was also conclusive when applied to the alternative of raising oats, it being conceded that oats would do tolerably well, at least as to yield.⁷³ Barley⁷⁴ and rye did not seem to gain in favor for a long time, principally because there were greater possibilities in wheat.⁷⁵ As a matter of fact they were both more certain to make a fair yield, and towards the latter part of the period barley did gain a considerable significance.

The reasons urged against stock raising were mainly two: first, it was not generally believed that grass or clover would flourish here; and second, quite as important, it was thought that the winters were so long and cold that the cost of housing and feeding must necessarily consume the profits. The poverty of the settlers was one of the most important factors in deciding the channels along which their energies should flow.⁷⁶ It required capital to invest in stock, and the keeping of stock required the additional outlay for fences and barns.

The belief that feed could not easily be produced was only natural, since cultivated grasses and clover do not take kindly to the conditions of early pioneer life.⁷⁶ They will not choke down weeds or brush in the woods; and not until prairie grass has been partially killed by cropping and trampling can anything better be induced to take its place; even if the wild land is first plowed, tame grass does not succeed well until after the sod is rotted.

⁷³"Oats yield well but are hardly worth raising, as they sell for fifteen cents."

⁷⁴Pat. Office Repts., *Agriculture*, 1852-53, p. 337.

⁷⁵For some phenomenal results in wheat growing, see *Wisconsin Farmer*, I, 44.

⁷⁶*Trans. State Agri. Soc.*, I, 133, 185.

⁷⁷Pat. Office Rept., *Agriculture*, 1852-53, p. 334.

In the case of wheat all seemed promising; it would do well on new land; in fact it was on new land that it did its best. Very little capital was required to begin wheat farming. A breaking team and plow, a harrow, and some seed wheat was enough for a start. While the acreage was small this was about all that was required with the exception of a wagon in which to haul the crop to market. The entire work of harvesting was done at first by hand. The sickle and the cradle in the farmers' hands constituted the reapers. The flail was sometimes used in threshing, but more often oxen or horses were made to tread out the grain as in ancient times. Men even made it a business to go about the country to do threshing with a pair or two of cattle as the sole threshing outfit. The grain was stacked around a circle or open space some thirty or forty feet in diameter. Preferably the stacks were left till the ground froze and then on this open space, scraped as clean as possible, the grain was spread, and the thresher, with his own oxen and those of the farmer for whom he was working, entered the ring and used alternately the lash and the pitchfork to keep the cattle in motion and the grain properly turned and shaken. In this way two men could thresh and clean in an indifferent manner fifty or sixty bushels of wheat in a day, and the thresher would take his pay in wheat, probably about four bushels.⁷⁷

These very primitive methods soon gave way to something more modern and effective. The fanning mill was introduced about 1840; a "moving threshing machine" came into use, and went out almost simultaneously, in 1846.⁷⁸ This machine consisted of little besides a small cylinder and a set of "concaves," with the ordinary teeth. The machine was mounted on a wagon, the power being applied by a chain running on a sprocket-wheel attached to one of the rear wagon wheels, and the work done as the vehicle was driven about the field. The straw was scattered broadcast from the rear of the wagon while the grain, chaff, and dirt fell promiscuously into the box. It is needless to say that farming operations were not revolutionized by this invention.

⁷⁷This is from a conversation with a Mr. Payne of Prairie du Sac, who worked at this kind of threshing as far back as 1845. See also *Life in Prairie Land*, Eliza W. Farnham, 283.

⁷⁸*History of Dane County*, 871.

A year or two later, a small stationary threshing machine was imported from Scotland;⁷⁹ still this was not a "separator" and it was not till the appearance of the well-remembered "Buffalo-Pitts Vibrator" about 1848, that anything striking was seen in the work of threshing. This with the appearance of the McCormick reaper in its various forms, the N. P. Many combined reaper and mower, and a little later the "Marsh Harvester," made it possible to raise wheat in large quantities.⁸⁰

The amount of wheat raised before 1840 was insignificant and was about all used up near the place where it was grown. The yield had been good and the anticipations of the farmer were aroused to fever heat. Yields as high as sixty or even eighty bushels per acre were reported and the quality was beyond anything else received in the eastern market.⁸¹

In 1840 the crop exceeded all previous records; the straw stood stiff and tall, yet loaded almost to breaking with heads filled with plump, hard grain. Everything favored a maximum yield. The soil was still rich in phosphates, due largely to the ashes from innumerable fires. It was principally winter wheat which was then grown and the deep snow of the previous winter had kept it blanketed from the weather and left it in prime condition for growth in the spring. Reports of Wisconsin wheat-growing went the rounds of the press and it was made to appear that a few acres of this matchless soil would secure a family against danger of want for all time to come.⁸² This was just on the eve of the great influx of Norwegians and Germans, who were accustomed to wheat fields in their native lands, and thus were easily convinced that wheat was the crop above all others to rely on here. Strange as it may seem, the question of markets did not become alarmingly important for some years, the immigrants requiring the bulk of the surplus. The milling industry was for a long time inadequate to the needs. Probably this was owing to the poverty of the settlers, and to poor communication with the East,

⁷⁹*History of Dane County*, 871.

⁸⁰"The amount of land that a farmer could cultivate was determined by the amount of grain he could harvest."—From a letter from Mr. Robert Steele of Lodi, Wisconsin.

⁸¹*Buffalo Commercial Advertiser*, September 21, 1847.

⁸²See Niles' *Register*, 58, 310. Many such articles may be found in the *Milwaukee Sentinel*, the *Wisconsin State Journal*, etc., for the year 1840.

for there was abundant opportunity to make good returns on an investment in grist mills.⁸³

With these conditions it can easily be understood why there was no great excitement over canals or railroads during the greater part of the decade between 1840 and 1850. The world had not then learned to want the news of the antipodes to be served at breakfast; the question of selling produce was not vital; and as to buying articles from the East, the westerners were passively willing to be humbugged.

The first intimation that there was a limit to the wealth of the wheat fields came in the disguised form of some partial failures in the winter wheat crop during the '40's; that is to say, failure and prosperity had about the same start in the race. Part of the wheat winter-killed and it was soon noticed that the only place where it seemed reasonably safe from this trouble was in the well-sheltered fields in the woods and to a less degree in the oak-openings; on the prairie it uniformly failed.⁸⁴ But spring wheat had been tried and found to produce a good crop in these open places, so the wheat fever was merely allayed a bit and showed no symptoms of subsiding. Spring wheat never equalled winter wheat at its best, either in quantity or quality, but while the land was new the returns were moderately good.

Being thus soothed and reassured, the farmer was ill-prepared for the rude awakening which came with the failures of all varieties of wheat from 1847 to 1853. For a time he would not be persuaded that the shortage was anything worse than a mere temporary misfortune caused by unfavorable weather; his faith in the soil was unshaken; and his hopes for the future were slow in waning. But there were several dormant forces which now asserted themselves, and compelled the farmer to face the facts. First in importance and persistency were the debts, contracted recklessly which now became due.⁸⁵ Creditors had previously been satisfied with the interest, which at the rates charged would equal the principal somewhere within four to eight years. Now

⁸³"Wheat is plenty and selling from \$.75 to \$.87½ per bushel, yet with all this, flour is scarce and held at \$7.00 to \$7.50."—*Madison Express*, October 27, 1841.

⁸⁴*Wisconsin Farmer*, III, 145; also confirmed in a letter from Mr. Robert Steele.

⁸⁵*Trans. State Agr'l Soc.*, I, 133.

the debtor's solvency came in question and the principal was demanded as soon as maturity was reached.

Another force which injured the farmer had been working away quietly—impoverishment of the soil. It was believed that the soil was good for an age without any attention to replenishment. How any intelligent set of men could be so blind to the fundamental truth of farming as to think it possible to subtract from a given sum without decreasing it, is beyond comprehension; but it must be remembered that Wisconsin soil did appear almost infinitely richer than the granite farms of New England, and even those who came from New York or Ohio had not, for the most part, lived in those states long enough to see the first virgin richness of the soil destroyed. At all events, the vision of a soil which could hold its own under the system of constant robbery was pretty thoroughly dispelled by 1851. No longer could the failure of wheat be charged to caprices of the weather, to poor seed, or to sowing in the wrong time of the moon; the fact of weedy, hard, unresponsive fields was in evidence. All at once there was great interest in scientific farming; the I-told-you-so prophets were ready to account for all the trouble; agricultural societies sprang into existence in nearly every county, and the poor farmer was berated and advised by editor, money-lender and his own fellow sufferers. Accounts of the conditions, and some of the causes for them are given by contemporaries:

"As to the manner of cultivation it is rather slovenly. First they have attempted to cultivate too much land with very limited means; next, they have been deluded with the notion that wheat could be grown successfully for an indefinite period of time . . . that manuring, rotating crops, seeding down with timothy, clover, and other grasses . . . was altogether unnecessary. To surround a quarter section of land with a sod fence, break and sow it to wheat, harvest the same and stack it, plow the stubble once and sow it again with wheat, thresh the previous crop and haul it to the Lake, was considered good farming in Rock county and it continued from year to year; hundreds confidently expected to win by going it blind in this very unscientific manner. Three years out of eleven have produced good crops of winter wheat."⁸⁸

⁸⁸*Trans. State Agr'l Soc.*, I, 211; see also 152ff, and *Wisconsin Farmer*, I, 248 and III, 44.

That the deterioration in quality was fully as serious as the decline in quantity of wheat, is shown by the fact that Wisconsin wheat brought the lowest price in the market wherever it sold.⁸⁷ A little care on the part of the farmer would have served to keep the quality up somewhat, at least for a time. A few seemed to know that ordinary barn-yard manure had a wholesome effect on land that was losing its available plant food, yet it was with rare exceptions that even the small amount of such fertilizer which each farmer had at his disposal was utilized. Handling manure was not fashionable, and no one wished to be thought eccentric. Yards were left till they could no longer be used conveniently because of the annual accumulations; horse stables were moved when the available space for dung heaps around them was occupied. Occasionally the manure was carted off to a marsh or creek and there dumped where it would no longer offend the eyes and nostrils of the aesthetic farmer but would be carried as far as possible from his premises.⁸⁸

Occasionally a farmer tried the experiment of fertilizing a piece of land and published the results.⁸⁹ The Englishmen were the exceptions to the general rule in this respect, they having learned the importance of fertilizers in their home country, and in consequence were among the most successful farmers of southern Wisconsin.⁹⁰

Even rotation of crops was not considered a serious matter and, therefore, received very little attention.⁹¹ Occasionally someone mentioned summer fallowing but it was seldom tried, in fact there is no reason to believe that it was practiced in this county at all, though it was not entirely unknown in other parts of the state.⁹² Fallowing has not at any time become common in this region, and for a very good reason: it is not needed; but at the time when small grain was raised eight or ten years in succession on the same land, it would have destroyed weeds and given the soil a tilth such as was unknown from the time the land was new till the advent of corn as a main-stay in farm economy.

⁸⁷Pat. Office Rept., *Agriculture*, 1852-53, p. 332.

⁸⁸*Wisconsin Farmer*, III, 44; V, 193; Pat. Office Rept., *Agriculture*, 1852-53; *Trans. State Agr'l Soc.*, I, 162.

⁸⁹*Wisconsin Farmer*, II, 29.

⁹⁰Pat. Office Rept., *Agriculture*, 1852-53, p. 331.

⁹¹*Trans. State Agr'l Soc.*, I, 162.

⁹²Pat. Office Rept., *Agriculture*, 1852-53, p. 333.

Thus at the beginning of the second half of the century the Wisconsin farmer was involved in debt; was following the same groove which was started by the earliest settler; was thoroughly discouraged. He blamed the weather, the banker, and the legislator, but considered that he himself had done all that strength of body and mind could enable one to do under such adverse circumstances. The weather had for some years been unpropitious and a change for the better took place; the legislature also became kindly disposed and passed several bills in the interest of the farmer, among which was one appropriating one hundred dollars a year to the country agricultural societies; recommendations for tariff reform were made to Congress, and inducements were offered to manufacturers to establish industries within the state.⁸³ These expedients were not wholly in vain, but they were inadequate to repair the damage already sustained. The bankers shewed no unwonted tenderness toward the embarrassed farmers, and the number of foreclosures of mortgages from 1846 to 1853 was not only great but continually on the increase.⁸⁴ For the most part the whole farm was not taken at once, but a forty or two for part payment of a debt.

In very many cases the amount of encumbrance under which these executions were made was no more than two or three dollars per acre. Interest remained at about the same figure, that is, nominally at ten per cent. for long-time loans, twelve per cent. on short time, while practically it was whatever the exigencies of each particular transaction would bear,—often double these rates. The inability of the farmer to pay these absurd charges was the immediate cause of so many mortgage foreclosures. Many gave up farming as a bad job, others moved to a newer country, not a few went to California.⁸⁵

Perhaps the hardest to be remedied of all the ills which beset the farmer were those acquired or inherent weaknesses of his own character, for with all his admirable qualities he was in many ways improvident. He complained that he could not keep cattle because it would take so much extra barn room and fence; yet

⁸³See *Wis. Assembly Journal*, 1851, p. 1124ff; 1852, pp. 939, 957.

⁸⁴The records in the office of the register of deeds show this to be true, and advertisements of land to be sold under mortgages may be found by the score in the *Wisconsin State Journal* for the years named.

⁸⁵*Trans. State Agr'l Soc.*, I, 230.

there was plenty of material near at hand, often on his own farm, to build all the fence he could possibly need; and as for barns, at least comfortable stables could be built with no other outlay than the labor required to cut the logs and put them in place; or they could be sawed and made into a fine frame building if a little money could be raised to pay for the sawing and carpenter work. In many parts of the country convenient building stone was to be had for the taking, and some very respectable houses and barns still standing were made of it. These are some of the historic possibilities; the facts are that the improvements up to the time under consideration were pitifully poor.⁹⁶

These conditions were in a great degree the outcome of wheat farming but, and this was more serious, these very conditions were beyond all else, the deciding influences in preventing a change to a better régime. Cows were to be had for twelve or fifteen dollars apiece, but this availed nothing to a man without money or credit even though he were paying twenty-five dollars a year for butter and cheese and letting grass and hay go to waste.⁹⁷ The same difficulties confronted him at every turn and thus we have the anomaly of a class of intelligent men who could not raise wheat, yet who were unable to quit the attempt and begin one of a dozen things which offered more returns for less energy. It seemed that something would of necessity happen before long or the very inertia of the system would carry the farmer to the foot of the ladder and all but compel him to start on a new career in a rational way—and something happened. The price of wheat rose from thirty-one cents to a dollar seventy cents between May, 1854, and the same month a year later.⁹⁸

This remarkable rise in price is usually attributed to the Crimean War, and no doubt correctly. Other produce advanced in price, but not in the same proportion, as wheat was the specific article in demand. The effect of this boom was electric. There

⁹⁶ " . . . a western settler will live for many years on his farm without ever having a barn, or other out building of any kind, except a very small corn-crib, and sometimes a stable, the dimensions of which correspond better to those of a poultry house than anything else. If barns are built they come along after many years under the head of admissible luxuries."—*Life in Prairie Land*, Eliza W. Farnham, p. 283.

⁹⁷ *Trans. State Agr'l Soc.*, I, 160-162.

⁹⁸ *Milwaukee Sentinel*, May 25 and June 30, 1855.

was no longer any thought of quitting the wheat industry, for even if the yield was small, the prospect of nearly twice as many dollars as bushels was enough to overcome all tendency to radical change. So the change that actually did take place was manifested in a new crusade in search of wheat land. Immigration from the eastern states and from foreign countries took a new start. Prairie land which had once been black-listed, now became so much in demand that it would sell at almost any price and on any terms. One man who still lives in the town of Dane paid twenty dollars per acre for an eighty, with interest at twelve per cent. and thirteen per cent. commission, making it twenty-five per cent. for the first year. As elsewhere noticed, it was under these conditions that the prairie was finally settled, and the prejudice against such land once for all silenced. The new impulse to wheat was sadly brief, but it was sufficiently long to bring with it evils which were long-lived. Prominent among these was the craze for horses to take the place of oxen; this was the first general move in that direction and the purchase of a team was in many instances the first act of a little play in which bankruptcy was the last. A span of good horses sold as high as four hundred dollars, and twenty-five per cent. interest was not unusual.⁹⁹

It takes a year or two to subdue raw prairie and reap from it a crop of wheat, and by the time any considerable quantity had been produced on this high-priced land the price of wheat had dropped to its old level or thereabouts. Did the farmer then revive his disposition to try another form of agriculture? By no means; he had again renewed his vision of wealth to be gleaned from his wheat fields, and this vision, even if a trifle dim at times, kept him plodding faithfully along in its pursuit through the remainder of the decade. Prices were low, crops were poor, debts accumulated; but in 1860 when it again seemed that a change to profitable farming was imminent, another lease of life came in the form of a remarkably heavy crop.¹⁰⁰ This is not hard to account for. The drouth, and rust, and rain, and blight, had in turn or in conjunction prevented the wheat from sapping the nutriment from the soil, and now they took a year off and the

⁹⁹From conversations with Mr. Blackburn of Verona, Wis.

¹⁰⁰See table at end of this chapter.

granaries were filled to bursting. The price was still low but this was offset by the yield, and again the farmer tacitly resolved to sink or swim with the wheat industry.

With the outbreak of the Civil War the following year, prices started on the up-grade and continued high for the remainder of the wheat period; but there were other considerations even more serious than the price.¹ About 1860 the chinch bug on his northern march had reached Wisconsin; this was certainly ominous, but no considerable share of the crop was destroyed until 1864, in which year and for the two succeeding years, the insect made a clean sweep of the wheat fields.² But thinking that when things were at their worst they must mend, the farmers kept the acreage up to a point near the maximum, and until almost the close of the '60's "the wheat crop scarcely lost prestige with our farmers." There were new forces at work to keep it in the lead, among which were, "scarcity of labor essential to all hoed crops, and the increase of mechanical facilities for harvesting" which caused wheat to be cultivated "with more than former zeal and energy." Other cereal crops about held their own.³

The increase in the price of wheat and the scarcity of labor during the war turned the attention of many ingenious men to the improvement of labor-saving machines to be used in sowing and harvesting wheat. Wisconsin was in the lead with these inventions. A Mr. Warner of Prairie du Sac constructed a reaper which is said to have done satisfactory work, and E. W. Skinner of Madison likewise won the admiration of the farmers by making a reaper which seemed to them wonderful.⁴ However, there was one of Wisconsin's soldier boys carrying an ordinary rifle in the Army of the Tennessee who was getting ready to be heard from. In the first place, he was dissatisfied with his rifle and spent his leisure moments throughout the war in attempting to

¹As in the prosperous period of the preceding decade the farmers decided that oxen were too slow for the times, and within a few years almost every man owned a team or two of horses. As before, horses were high, but general high prices enabled the farmer to meet most of his obligations, and the transition from the one class of draft animals to the other was accomplished.

²*Trans. State Agr'l Soc.*, VII, 33.

³*Ibid.*, 33ff.

⁴We have here an example of the helplessness of an individual in competition with a wealthy firm; either of those men could make a reaper that would satisfy the trade, but neither, nor both, could keep abreast with Cyrus McCormick, who could buy the patents of a dozen inventors and combine them.

perfect the "pin-fire" breech. In this he was at least partially successful, but a shrewd fellow came around and tried to bluff him out of a patent, accusing him of stealing the idea; however, the stranger would compromise, and they struck a bargain at seventy-five thousand dollars. Taking this money, the inventor at once turned his attention to a self-binding attachment to the harvester. There was already a machine which bound by using wire, but to this there were many objections, and a "twine binder" had been suggested by both farmers and inventors.⁵ This man had watched his mother at her wheel, tie, with her left hand alone, what was called the "granny knot," and it seemed to him that it was done so easily and mechanically that an artificial hand moved by a chain or gearing could be made to perform the same trick. To make a long story short this was John F. Appleby of Mazomanie, Wisconsin, who, after spending the money received for his gun and as much more loaned him by a friend and fellow townsman named Thompson, perfected the famous "Appleby binder" which may be seen today on almost any binder in the market.⁶

Thus Wisconsin had evidently solved her own problem in the matter of wheat production; it could now be harvested with little additional expense for labor; but the blaze of triumph turned out to be a torch at her own funeral. The economy reacted in favor of her competitors for the great wheat fields of the West now came to the front with their endless quantities of a superior quality of grain. The only advantage Wisconsin had over the farther West was in transportation, and this was a matter of small moment after railroads were once built,⁷ in no wise adequate to balance the unexploited fertility of the new districts. The verdict was read in the weedy fields and shrunk and chaffy grain of Wisconsin, in marked contrast to the clean, full-weight product of Minnesota and Dakota. It was merely a new chapter in the same law which a generation before put Ohio at the head of the list of wheat-growing states and then remorselessly dropping her down to insignificance, passed the honor along to be held

⁵A wire binder which seems to have worked well was invented by S. D. Carpenter of Madison. See *Wisconsin State Journal*, December 29, 1866, August 25, 1867.

⁶These facts were learned from Mr. John Avery of Prairie du Sac, an old comrade and neighbor of Appleby's.

⁷See Transportation, Sec. II of this chapter.

for brief periods by Indiana, Michigan, Illinois, and so on in turn. Wisconsin had held out well in the struggle, she had used up a considerable share of the fertility of her soil; had worn out a generation or more of hardy farmers;—she can never be charged with inconstancy, for she held on till the bitter end. During the latter part of the '60's, wheat crops in Dane county were almost complete failures and by 1870 wheat could no longer be called the principal crop. In a minor way wheat culture persisted and still does, but for the great majority the wheat tragedy had ended.

Acreage, yield and prices of wheat.

Year.	Acreage.	Bushels.	Year.	Prices.
1840.....		290	1841.....	\$1 23-\$1 28*
1850.....		347,250	1844.....	35- 87
1857.....	61,409	1,049,000	1846.....	60- 62
1860.....	130,145	3,005,000	1849.....	30- 70
1865.....	108,447	663,440	1851.....	30- 50
1866.....	65,013	1,062,000	1852.....	30- 50
1870.....		2,535,800	1853.....	40- 55
1875.....	112,431		1854.....	30- 1 00
1880.....	66,448	764,839	1855.....	1 20- 1 70
1885.....	25,725	454,000	1857.....	36- 1 10
1890.....	23,493	299,000	1860.....	50- 93
1895.....	6,695	53,900	1863.....	1 10- 1 21
1900.....	5,367	79,158	1865.....	90- 1 30
			1866.....	1 56- 1 90
			1870.....	84- 1 00
			1872.....	98- 1 16
			1875.....	90- 1 02
			1880.....	1 02- 1 08
			1885.....	65- 72
			1890.....	77- 88
			1894.....	63
			1906.....	73- 88

* For 1841 and 1885-1906, the quotations are for Milwaukee, the rest for the Madison market, taken from Madison papers.

SECTION II.—TRANSPORTATION.

Aside from the question of making a living for himself and family there was no subject of more vital concern to the farmer than that of transportation facilities for surplus produce. This was not merely a problem for legislative consideration; it was a live, personal interest, and every farmer was ready to assume, not only his little share of responsibility in deciding between two possible contingencies, but the leadership, so far as he could command it, in shaping the course that public activity should follow. It could hardly be expected that any body of men of such different characteristics in nationality, politics, and education, would agree on the means to a solution of even so general a question as road building; and they did not. One party looked to the federal government for aid in the form of land grants; another advocated the bonding of cities and towns for bonuses to be given, with the prospect of indirect returns from the company thus encouraged; many persons were willing to mortgage their farms for a thousand or two thousand dollars, or take shares in the road; a very few would have the state take charge of the matter.⁸ To a degree, each of these factions accomplished its end.

The party which looked to the federal government for aid was from the beginning a strong one, and the advantage to be gained from these contemplated improvements was always shown to be national, not merely local. In a letter to the territorial representative in Congress, Governor Doty stated the problem as it then appeared: "To open a free communication by water from Lake Michigan to the upper Mississippi so that the Mississippi steamboats can meet the lake boats, is a great national object. . . . No calculation can be made of the advantages to trade and to the Union, hereafter, of this navigation."⁹ A second recommendation was for the improvement in navigation of Rock River and its branches, Pecatonica River, and Eastern Fork, to connect with Milwaukee River, and of the latter stream to Lake Michigan.

During the same year there was an urgent petition sent to Con-

⁸*Wisconsin Enquirer*, January 23, 1841.

⁹*Wisconsin Enquirer*, June 1, 1839.

gress asking for an appropriation of money for constructing a railroad from Milwaukee to some point on the Mississippi. It set forth that the territories of Iowa and Wisconsin had contributed so much to the national treasury from land sales that it would be but fair to appropriate money for the construction of the road so much needed.¹⁰

The petition further urged that the contemplated road was destined to be a paying investment from the first, as the great quantities of lead and the newly developed grain fields required an outlet more favorable than the long route via New Orleans. This view was general, and well founded, as seen in the schedule of freight charges on fourteen million pounds of Wisconsin lead.

"I.

By the way of New Orleans:

\$.31 per cwt. for delivering it upon the Mississippi	\$43,400.00
\$1.25 per cwt. from thence to New York....	175,400.00

II. \$218,800.00

By way of the Erie canal:

\$.35 per cwt. to Lake Michigan.....	\$49,000.00
\$.42 per cwt. from thence to New York....	58,800.00

\$107,800.00

Making a saving in transportation by way
of the Erie canal, of..... \$110,000.00"¹¹

The thirty-five cents per hundred allowed as charges to Lake Michigan was based on an estimation of probable railroad tariff

¹⁰As a stronger plea it was urged that "when the National Import of the Improvement is taken into view, it would seem as if the enlightened wisdom of your patriotic Bodies could not possibly consent to retard the prosperity of our beloved country by withholding the comparatively trifling appropriations which would secure to the Union *generally*, advantages such as human capacity cannot estimate; . . . This road . . . would prove of paramount utility in the not impossible event of foreign invasion. . . . It would constitute a great link in the great Oregon Railroad to which the indomitable spirit of American enterprise will, at no distant day, exhibit to an admiring world."—*Wisconsin Enquirer*, November 2, 1839. A memorial was sent to congress in 1836 asking nearly the same things, and two thousand dollars was appropriated for a preliminary survey.—*Milwaukee Advertiser*, July 21, 1836, and *Wisconsin Enquirer*, December 1, 1838.

¹¹*Milwaukee Advertiser*, July 21, 1836.

and was no doubt reasonable.¹² The question of an outlet for grain was then of secondary importance and it was destined to remain so for more than ten years.

The first desideratum in the matter of roads was the modest requisite of passable highways over which teams could move light loads without danger of being stalled. It is true that there was a little flurry of excitement among the earliest settlers over the problem of markets, hence the above mentioned memorials, but by the time there was any considerable number of inhabitants in the territory the first interest had subsided. The local markets, patronized so extensively by the constantly arriving immigrants who took about all the surplus produce, tended to cool the enthusiasm of railroad promoters. However, it must not be understood that there was ever a time when the agitation ceased; there was not, but there was a period of ten years when the sentiment in favor of any radical measures to bring about a new era in transportation was at a low ebb. The following words, though perhaps a little extreme, give a picture of the conditions which had to be faced, and at the same time the views of a considerable portion of the inhabitants:

"We are highly gratified with the course which our legislature is taking in relation to internal improvements; railroads and canals seem to occupy little of their attention. . . . They seem more disposed to adapt their acts to the circumstances of the people, instead of being hurried away by chimerical extravagances which have already dragged some of the neighboring states to the very brink of bankruptcy. . . . Railroads will not be needed in this territory for the next twenty-five years—perhaps never. The utility of such works is almost exclusively confined to the transportation of passengers on some great thoroughfare. For carrying country produce to market a good common road is just about as valuable, and a macadamized road vastly superior. Upon these farmers can travel with their own teams and the expense of transportation is hardly perceptible. We venture to assert that if the railroads authorized to be constructed in Illinois were once completed they would, over and above the

¹²It is stated, however, that lead was actually hauled by team for that sum. *Madison Express*, December 28, 1839.

cost of construction, be an expense to the state for the next quarter of a century.

"The great fault of our western legislators seems to have resulted from their incapability of reducing their ideals to a level with their circumstances. Colleges and universities and railroads and canals have been all their themes, while common schools and common roads seem to have been regarded as altogether unworthy of attention . . . if they had been content to walk upon the earth instead of endeavoring to fly through the air their schemes, if not so splendid, would have been useful. We congratulate our citizens upon the prospect that legislators are about abandoning the fashionable gewgaws of fancy for the humble blessings of reality"¹³ This eminently practical and terrestrial legislature had certainly done commendable work in forwarding the construction of common wagon roads which were necessary whether railroads and canals were made or not. During the year 1839 the road from Madison to Milwaukee was located and ten thousand dollars expended in its improvement; it was estimated that five thousand more were needed to put it in shape to satisfy the demands.¹⁴ From this time until about 1862 almost every legislature voted money for building plain wagon roads, and by that time there were seven main-travelled roads leading from Madison to the various parts of Dane county and beyond.¹⁵ In the same period projects continued to be rife for canals and river navigation. The Rock River canal was begun July 4, 1839. It was never finished, yet the vision of running steamers from the Mississippi to the lakes by way of the Fox and Wisconsin rivers persisted in the minds of many farmers and legislators for more than a generation. The whole subject of water transportation may be dismissed briefly by stating that the only grain of any consequence ever carried in this way from Dane county was taken up the Wisconsin from Prairie du Sac to Portage after the railroad had reached the latter place, and was there re-shipped. This was merely a make-shift and cost from three to six cents a bushel for wheat, above the charges from Madison, and so continued until the Chicago, Milwaukee and St.

¹³*Wisconsin Enquirer*, December 14, 1839.

¹⁴*Wisconsin Enquirer*, April 22, 1840.

¹⁵*Wisconsin State Journal*, March 25, 1857.

Paul Railroad Company built a branch from Mazomanie to Prairie du Sac in 1881.

The real struggle in which wheat growers were concerned was that between the advocates of railroads, on the one hand, and promoters of plank, or other wagon roads, on the other.¹⁶ The country roads were in deplorable shape¹⁷ and the only reason they could be tolerated was because they were needed so little. Such things as dry goods and groceries do not count up into tons rapidly where the population is still sparse, and farm produce was not yet demanding attention. By 1845 it was apparent that some kind of improvement must be made to afford means for reaching a market. This was no sudden awakening. The early settlers were already familiar with the stage coach, having come a considerable part of the distance from the eastern states by this means. They were accustomed to the slow movements and high charges,¹⁸ yet there was little complaint. It may thus be understood why plank roads were looked upon as a boon while the demands for transportation facilities were moderate.

Wisconsin began her territorial existence at the most opportune time for avoiding the slough of indebtedness, such as had come near being the ruin of some of her neighbors, and thus we find little disposition for state activity in road building. The plan adopted was to charter private companies and allow them to build the roads and charge toll. It was calculated that the cost of hauling freight over a good plank road did not exceed twenty-five, or at most, forty per cent. of the cost on a plain dirt road.¹⁹

The first charter for a plank road was secured in 1846 and from then till 1871 no fewer than one hundred fifty such companies were chartered.²⁰ Few of these enterprises concern us. However there was some enthusiasm over such roads from the time wheat production made transportation a question

¹⁶For an excellent treatment of the whole subject of "Railroad Legislation," see article by Dr. B. H. Meyer, *Wis. Hist. Coll.*, XIV, 206.

¹⁷*Wisconsin Enquirer*, October 22, 1848.

¹⁸"Stage Route: Twice a week each way.

From Mineral Point to Madison, \$5.00.

From Madison to Ft. Winnebago [Portage], \$4.50.

25 pounds of baggage allowed each passenger."

—*Wisconsin Enquirer*, November 15, 1839.

¹⁹*Madison Argus*, December 5, 1848.

²⁰Thesis by W. L. Bolton, 1897. Library of University of Wisconsin.

of prime importance, and in 1853 a plank road from Milwaukee reached the eastern part of Dane county.²¹ That it was an improvement over the old wagon road no one will deny, but the warm advocates of such a highway became rapidly fewer. The tolls were considered too high and many teamsters turned off to the old road long enough to avoid the toll stations and yet get considerable benefit from the plank road. The oxen could hardly be kept on the planks because it made them foot-sore. Another trouble came from the unevenness in the way the planks settled into the spongy soil, and many a heavy load had to be taken from the wagon because a wheel had slipped over the side of the slanting road. Besides all this, the planks were laid with almost no foundation except the ground itself and in an incredibly short time decayed and became merely an impediment. We are, therefore, safe in saying that plank roads were a disappointment, and in no sense a solution of the transportation difficulties. As the central and western parts of the state became thickly settled by farmers, who gave almost all their energy to the growing of a crop which must find its market in the eastern states, the demand for railroads at once overshadowed all other plans for meeting the requirements. By 1848 the interest in railroads which had been dormant, began to show signs of awakening.²² Meetings were held in almost every town and in very many cases there was a strong sentiment in favor of voting bonuses to aid in the construction of the proposed road.²³ In some cases these were actually paid.²⁴ The town of Lodi, which joins Dane county on the north, was bonded for forty thousand dollars to induce the Chicago & Northwestern to build through its territory. A proposition to bond the town of Medina for twenty-five thousand dollars to be given as railroad bonus was lost by two votes.²⁵ Dane township bought ten thousand dollars worth of stock in the Baraboo Air Line Railway Company and when the road was actually built by the Chicago & North-

²¹ *Wisconsin Express*, February 21, 1852; *History of Madison, Dane County, and Surroundings*, p. 230.

²² It must be remembered that this refers to the farming class.

²³ *Madison Argus*, March 2, 1848; *Wisconsin Express*, May 1, 1852.

²⁴ For the aid given in the form of public land grants, see "Congressional Grants of Land in Aid of Railway," by John Bell Sanborn, *Bulletin of University of Wisconsin*.

²⁵ *History of Madison, Dane County, and Surroundings*, p. 231.

western Company the stock was surrendered at thirty per cent., and the township raised and paid the difference of seven thousand dollars.²⁶

This was wild financiering and in every case resulted in humiliation and repentance, but the reason for taking such steps is easily understood.²⁷ The increased production together with the advancing prices of wheat hastened the construction of railroads, and by 1854 the Milwaukee & Mississippi road had reached Stoughton; the next year it came to Madison, and when in 1856 it was extended to the west, reaching the Mississippi at Prairie du Chien, the momentous question was solved.

Hardly had the eloquence of after-dinner speeches in laudation of the new wonder subsided, when the tones were changed to denunciation of the "giant monopoly" which was fleecing the farmer. This was especially flagrant when it was remembered that the farmers had so recently given of their means and influence to assist in the building of the road. The objections were well founded, for unfair discriminations began at once and continued in the face of vigorous and persistent remonstrances. The railroads had the upper hand; there was no competition from Madison and vicinity to Milwaukee, and the amount of wheat to be hauled was enormous. Early in the year 1857 the opposition to exorbitant profits began to take shape. It is to be regretted that this opposition was not more effective.

It was pointed out that the charges for hauling wheat to Milwaukee by rail were for a time equal to the prices by wagon,

²⁶ *History of Madison, Dane County, and Surroundings*, p. 646.

²⁷ The value of wheat and corn per ton at different distances from market as affected by cost of transportation, by railroad and over the ordinary roads of the country as given in *Industrial Resources of Wisconsin*, John Gregory, p. 236, was as follows:

MILES TO MARKET.	BY RAIL.		BY ORDINARY HIGHWAYS.	
	Wheat.	Corn.	Wheat.	Corn.
10.....	\$49 50	\$24 75	\$49 50	\$24 75
50	48 75	24 00	42 00	17 25
100.....	48 00	23 25	34 50	9 75
170.....	46 95	22 10	24 00	0
230.....	46 05	21 36	15 00	0
300.....	45 00	20 25	4 50	0
330.....	45 35	18 80	0	0

then dropped just enough to cut off all such competition.²⁸ The overcharges were computed at ten cents a bushel on wheat, making fifty thousand dollars for Dane county. Other produce was estimated to bear an equal tribute.

The grain dealers at the various shipping points were in disrepute as well as the railroads, and to cope with them the Dane County Farmers' Protective Union was organized. This "Union" was directed against the grain buyers, but even if the charges were true, it still appears that the railway extortions were equally obnoxious.²⁹

But even in its attacks on the weaker of the two monopolies the farmers' union was an abject failure. An elevator was built at Madison, and wheat was brought from all corners of the county and there stored, in custody of a man chosen to act as agent. The agent sold the wheat, pocketed the proceeds and took "French leave." The chagrined farmers hushed the matter up so that hardly a line relative to the matter appeared in print. The elevator burned down, and the Farmers' Protective Union collapsed.³⁰

By the fall of 1857 the railroad managers had become sufficiently alarmed to make some concessions, for matters had reached a serious state.³¹ On September 1st, 1857, rates on wheat from Madison to Milwaukee were cut down from fourteen cents to eleven cents, and on this basis the local buyers filled their elevators. Nineteen days later the rates were restored to the old

²⁸*Wisconsin State Journal*, February 14, 1857.

²⁹"Hitherto this wheat [i. e., from Dane county] has not been worth as much as wheat at Prairie du Chien, one hundred miles west of Madison, because the railroad conveyed wheat from the former place, two hundred miles to Milwaukee at five or six cents less per bushel than it charged for carrying it from this city one hundred miles. A railroad connection with Chicago is about to put an end to this order of things. The farmers of Dane county will be able to get five or six cents a bushel more for their wheat than they have heretofore received upon the market at Milwaukee. Say the amount is five cents per bushel and that we produce a surplus of 600,000 of the 1,000,000 bushels annually raised. This will put \$30,000.00 more money in the pockets of the farmers the present year than they would receive but for the railway connection with Chicago."—*Wisconsin State Journal*, April 23, 1863.

³⁰These facts were learned from Mr. Robert Steele and other old settlers.

³¹The reasons for the remonstrances and something of the feeling manifested are thus pointedly told: "The Milwaukee and Mississippi Railroad charges as much for bringing freight from Milwaukee [to Madison] as the other transportation companies do from eastern ports to Milwaukee. People prefer to ride in a stage rather than aptronize their enemies."—*Wisconsin State Journal*, August 22, 1857.

figure and the grain buyers brought suit against the road for violation of implied contract. Even the building of the railroad from Chicago to Madison offered but temporary relief, and the same abuses again called forth the same cry of distress. For a time the struggle between the river transportation to St. Louis and the roads connecting the Mississippi with the lakes resulted in favorable rates to towns along the Mississippi, while Dane county farmers paid nearly the rates formerly charged for hauling by wagon. After this war had been settled in favor of the eastern route, and it looked as though fair play might as well be practised, the different roads began underbidding one another for the carrying trade from the great wheat fields of the west, and the wheat grower of Iowa and Minnesota received more for the same grade of wheat than did the discouraged farmer of Dane county three hundred miles nearer the market.³² Thus the struggle for transportation facilities was continuous and bitter, and not till after the farmer had been forced out of wheat production as a main business was anything approaching fairness in freight rates obtained. In all this time—a period of nearly twenty years—it does not appear that the farmers had been able to exert any telling influence in the struggle for their rights. Here was a case where nothing short of state regulation could set matters right, and although vastly in the majority, the farmers, it is painfully evident, were not the dominant force in state politics. One explanation of this is seen in their slowness to comprehend the fact that railroads, and railroads alone, must be the means of carrying grain; they never gave up the belief until the transportation question dwindled in importance, with the change to less bulky productions, that competition between railroads and river or canal transportation, was the only source of relief.³³

³² *Madison Democrat*, May 31, 1869.

³³ *Madison Democrat*, August 18, 1869.

PART II.—DIVERSIFIED FARMING.

CHAPTER I.

THE TRANSITION FROM SIMPLE TO COMPLEX AGRICULTURE.

The change from simple to complex agricultural conditions did not happen in a day. It came so gradually that those who made the changes, and were themselves at the same time undergoing a modification no less pronounced, hardly realized that anything of far-reaching consequence was happening. These results were brought about primarily by economic causes already noted, together with some important social influences, while later, political movements were of equal significance.

Among social influences a few stand out with unmistakable clearness. The Ohio people, in the southern, the northeastern, and the northwestern, parts of Dane county, all engaged to greater or less extent in sheep raising. They had all learned something about the business before coming and were able to bring a few sheep along with them. The Vermonters were also disposed to own sheep, and occasionally an Englishman or a Scotchman ventured to invest in a small flock. There were many drawbacks to the business, yet it persisted in a tentative way from its introduction in the early '50's until a time when opportunities came to give it more attention. To the Ohio people is also due the credit of introducing tobacco culture. The explanation of this is analogous to that of the introduction of sheep—they had learned the business at home and brought it with them. Cattle were of course indispensable, but it was the cheapness of this kind of stock in the older states of the Northwest which accounted for the fact that cattle raising came in as fast as it did. Hogs were kept as exten-

sively as the market would stand, until the high-price period of the '60's, and why they were not then raised in large numbers instead of by the half-dozen or so, is a hard question to answer. It is usually said that the price of breeding-stock was so great that few could afford the investment. This is about equal to arguing that seed corn is too valuable to plant, and therefore must be made at once into meal. A few men did have enough foresight and enterprise to go into the business in earnest and these were soon able to pay off the incumbrances on their farms and to buy more land as well. Fat hogs sold as high as fourteen dollars per hundred for a time, but to a farmer with fewer hogs than it takes for a wagon load, as was the usual condition, this was a matter of small concern. As for cattle, the difficulty of getting a start was serious enough to be accepted as a good argument, against raising them; but in letting the years from 1861 to 1868 slip without branching out into the swine industry, the Wisconsin farmer missed an opportunity such as comes to few generations of farmers.

The war was the cause of many experiments and modifications in agriculture throughout the North. One of the most noticeable of these was the attempt to produce sugar at home. In Wisconsin there was considerable excitement over the possibilities of growing sorghum on a commercial scale. Meetings were held, and papers were read and published, in which it was predicted that we could easily get along without Louisiana sugar; that the inconvenience of the high tariff on foreign sugar would be forgotten when sugar was made in sufficient quantities at home, and that molasses and sugar might possibly be exported. Even the seed was to prove an item of consequence by affording feed for stock.³⁴ A state convention was held at Madison for the purpose of diffusing sentiment and gathering information.³⁵

Under the same stimulus the production of honey increased several hundred per cent., but even then the total amount was not a matter of consequence.

Another crop which attracted considerable attention for a brief

³⁴ *Wisconsin State Journal*, April 8, 1863.

³⁵ *Wisconsin State Journal*, January 21, 1864; *Trans. State Agr'l Soc.*, VII, 35, 100; an account of this convention appears in the same volume.

time was flax. The first of any importance raised in the county was in 1851, and had the flattering results of the experiment proved to be the rule, the distinctively wheat period would, no doubt, have terminated soon after that date.³⁶ Coming as it did, at a time when wheat had been for several years a failure, it is no wonder an innovation of this kind should be taken seriously. At this time the main plan was to manufacture linseed oil and thus effect a big saving in freight.³⁷ There were several reasons why flax could not gain permanently in favor. In the first place, it would not flourish on impoverished or foul land, yet this was the only place there was to put it except on newly broken soil, which usually did well in wheat. Again, the average yield of flax was small, and finally it was believed to be peculiarly exhausting to the soil. On the other hand, the yield and price of wheat were just on the eve of an advance, and the flax project was soon forgotten, until in the '60's when the high price of cotton cloth brought it forward again as a possible solution to the question of cheaper clothing; the amount produced however was insignificant.

Hemp was another exotic which came in with war-time prices and in 1865 something over eight thousand pounds of fibre were produced in Dane county.

More important than any of the foregoing changes was the impetus given to wool production. Before 1860 the number of sheep kept had suffered a decline; now within four years there was a fourfold increase. In view of the good prices of wool and mutton, the pastures and meadows required for feeding the sheep, and the utility of this animal in ridding a farm of weeds and adding to the fertility of the soil, the increase in sheep raising may be counted as one of the first permanently helpful incidents of the wheat period.

It should also be noticed that the better prices for barley and oats, the need of corn for feeding the increasing numbers of farm animals, and the room given to the new crops above enumerated, though of small significance taken separately, had in the aggregate made a perceptible reduction in the acreage sown to wheat, and thus perforce introduced a system, though an imperfect one, of rotation.

³⁶ *Wisconsin Express*, March 4, 1852.

³⁷ *Wisconsin Express*, March 18, 1852.

Altogether the system of agriculture in 1870 was radically different from that of a decade before. The change had not come by observation; it had crept in little by little, and had the ninth census been more complete, the returns would have occasioned even a greater surprise than they did.

CHAPTER II.

HOPS.

The first break in the monotonous round of wheat culture in Wisconsin came with the brief but exciting period of hop growing. For nearly thirty years the farmer had gone over the dismal routine of plowing, sowing, and harvesting, the crop often poor in quality, usually low in price; he saw his land steadily becoming less productive, yet with persistence more heroic than intelligent, he had consistently refused to be led from his beaten path by the most reasonable and stable temptations. But even this dogged conservatism was not entirely secure from contaminating influences, and it finally broke down under a complication of internal and external attacks.

The hop craze, although exceedingly brief in its main outlines, had its roots grounded well back in Wisconsin history. There is hardly a doubt, although the data for proof are not at hand, that the introduction of this crop is to be credited to the people who were familiar with its culture in the state of New York. At all events, the names of the men who first are mentioned in this connection are without exception the names common in New York settlements.³⁸ As early as 1850 a few attempts had been made in the direction of hop culture, and the results were flattering indeed.³⁹

The success of hop growing was so well proved that by 1853

³⁸*Trans. State Agr'l Soc.*, III, 59.

³⁹"I have been in the hop culture . . . three years in Wisconsin. . . Good corn soil the most suitable for hop-raising . . . five acres last year gave me one ton of hops per acre, which I consider as an ordinary yield with good care. The cost of cultivation is about six cents per pound. . . I sold the yield of my five acres for \$1,400.00. I consider the hop crop as sure as any I have ever raised. It can be kept up ten or twenty years with good management."—*Wisconsin State Journal*, Jan. 18, 1854.

it would seem that the time for a boom in it had arrived; but not so. It will be remembered that this was just on the eve of the impetus given the wheat industry by a period of high prices; thus the hop fever lay dormant for a long interval. Other visions occupied the farmer's mind, with wheat always in the foreground. With the dull times of the late '50's advocates of hops tried to assert themselves; but not till the hopes of fortunes in wheat had been abandoned in the chinch-bug period, did hops receive the serious attention which seemed destined to be paid them for a season. Still it was not the failure of wheat alone. The rise in the price of hops was a factor of equal importance. The following quotation seems to be so admirably to the point as to be worth giving in full:

The "introduction and extraordinary run [of hop culture] in this state are mainly due to three circumstances—the failure of the crop, or rather repeated and utter failures of it, owing to ravages of its insect foes, in New York and other portions of the East, whence western supplies, even, had been largely drawn; to the fact that some of the largest establishments [breweries] of the country—and a good many of them—were located in our own Metropolitan city; and to the further reason that the climate and soils of Wisconsin seemed to be admirably adapted to its healthy growth.

"The crop of 1860 was so trifling as hardly to deserve mention. But in the year 1864 it amounted to 385,583 pounds, as shown by the incomplete returns to the secretary of state, with a value of \$135,127; and in 1865 to 829,377 pounds with a total value of \$347,587. But even this was only the beginning. In 1866 the business of planting and poling began in earnest and before the season was over, the fever raged like an epidemic. Gathering renewed force with every new acre planted in the county of Sauk, where it may be said to have originated, and where the crop in 1865 was over half a million pounds; it spread from neighborhood to neighborhood and from county to county until by 1867 it had hopped the whole state over; so completely revolutionizing the agriculture that one in passing through found some difficulty in convincing himself that he was not really in old Kent of England. Even many of our old fashioned wheat farmers caught the infection and for once have disturbed the

routine of their operations. In 1867 the crop in Sauk county alone, which has still the honor of being foremost among the forty or more counties that have enthusiastically followed, is believed to have been over four million pounds, with a cost value of little, if anything, short of \$2,500,000.00.

"Cases are numerous in which the first crop had paid for the land and all the improvements, leaving subsequent crops a clear profit, minus the cost of cultivating and harvesting. The crop of the present year throughout the state will be so great that we dare not venture an estimate. The yield in various parts of the state equals one ton to the acre, and the Wisconsin hop commands the highest price in the eastern market.

"Already the hop-louse has discovered our magnificent crop and sent out his skirmishers to prepare the way doubtless for a general attack. Moreover, the price seems sure to decline before any newly planted yard or field can possibly yield its first marketable crop. Fifty-five cents, the price of last year's crop, paid magnificently; but twenty-five cents would hardly warrant the sacrifice of every other interest to go into this particular business."⁴⁰

As would be expected, the profits of hop growing were greatly exaggerated. The *Baraboo Republic* estimated the cost of starting a hop yard as five hundred dollars per acre. This seems high, but it must be remembered that a hop shed was a building which involved no small expense and was indispensable to success in the business. The roots for planting an acre, though a small item in the expense, cost sometimes twenty dollars; poles were another matter of considerable consequence, and the work involved was greatest of all. Twenty-five cents per pound was estimated as the lowest price at which crops could be grown with profit.⁴¹

When the time for picking arrived, which began about the last week in August, there was a general rush of girls and boys, mostly the former, from distances of a hundred miles to the hop field. "Every passenger car is pressed into service, and freight, and platform cars are fixed up as well as possible for the transportation of the pickers. Every train has the appearance of an excur-

⁴⁰*Trans. State Agr'l Soc.*, VII, 36.

⁴¹Article quoted in *Wisconsin State Journal*, May 11, 1867.

sion train on some great gala day, loaded down as they are with myriads of young girls. The most of them have their places of labor engaged in advance."⁴²

The price paid for picking was forty or fifty cents a box. This great expense induced a Sauk county man to attempt the invention of a hop-picking machine, which was to save the county a million dollars for help in one season.⁴³

It is doubtful if Wisconsin farmers ever made money so fast or so easily at any other time or in any other business, as in hops for the two or three years preceding 1868. There are still to be seen in the main hop districts, barns which were once hop houses; and residences, which if not particularly elegant at present, show a magnificence entirely out of keeping with the later '60's. There are also stories, more or less reliable, of fine carriages, new harness, and high-stepping horses, pianos, and trips abroad, all based on the fabulous wealth made, or more often to be made, from hops.⁴⁴ This phenomenal prosperity dropped with hardly a premonition upon the shoulders of men little wonted to the handling of money in considerable sums, and the wonder would be in stories of a different nature, rather than in the doleful tales as they are. Feeling that they had a secure and lasting hold on a veritable bonanza, they had no hesitancy in contracting debts of any size or paying any price, however high, if only fancy prompted their untrained judgments to make the venture.⁴⁵ By 1868 the fairy tale was about told; hops were again growing in New York, and the price was on the down grade while, worst of all, the rust and the hop-louse were running riot in the Wisconsin yards.⁴⁶ As an example of the temptation to risk every thing in this one precarious industry, one farmer is reported to have raised in 1867 three thousand one hundred pounds of hops on a single acre and sold them at \$.58½ per pound.⁴⁷ It must be admitted that something more than ordinary judgment was needed to keep men from embarking in an adventure with such inducements.

⁴²Madison *Democrat*, September 1, 1868.

⁴³Madison *Democrat*, June 1, 1868.

⁴⁴This statement is based upon conversations with A. A. Mickelson of Black Earth, Mr. John Lorch of Madison, and many others who knew the circumstances.

⁴⁵*Trans. State Agr'l Soc.*, VII, 420.

⁴⁶Madison *Democrat*, September 16, 1868.

⁴⁷*Wisconsin State Journal*, December 6, 1867.

One writer remarks that ninety out of a hundred would engage in such a reckless pursuit, even though their judgment told them that, in a series of years, they would be worse off—"slowly accumulated wealth will not do for our people."

The prices of provisions responded readily to the new impulse; for example, butter which had before been a drug at fifteen cents, now sold for forty cents in hop-picking time. The store keepers took advantage of the occasion to collect back debts and take an added toll from the goods then on hand, but most of them paid dearly for it in the end by giving credit anew and eventually failing to collect the bills. Interest overleaped all bounds and came up to a point about equal to that reached in the preceding years. "There is money in the country, but it demands extremely high rates of interest; as high as ten per cent. per month has been paid for the use of money."⁴⁸ Horses and other live stock advanced somewhat, as near as may be learned, but it does not appear that the price of land was at all affected. It may seem a little strange that land producing a hundred dollars and upward per acre should continue at the same price, and as a matter of fact, farms with flourishing hop yards did sell occasionally, i. e., within a few years, for less than the mortgage placed against them during the hop craze, but this was due to a false estimate of the improvements as there was at all times a great deal of land to be had suitable for hops which was not so used.

The hop episode ended as suddenly as it had begun. The crop of 1867 sold readily at fifty or sixty cents a pound; the crop of 1868 was the largest raised, but the quality was far below that of the preceding year, and rather than take half price a great many held the hops over to the following year, by which time the bottom had dropped completely from the hop market and the old crops were sold in Milwaukee as low as two and a half cents a pound.⁴⁹

It will be noticed that the state instead of the county has been treated in this chapter; this is because Dane county was sufficiently involved in the hop industry to require recognition in some way, but was not a typical hop-growing county of the state.⁵⁰ It

⁴⁸ *Madison Democrat*, September 19, 1868.

⁴⁹ *Trans. State Agr'l Soc.*, IX, 28.

⁵⁰ The data on Dane county hops are hard to find. In 1850 the yield is reported as 120 lbs.; 1866, 10,800 lbs.; 1875, 274 acres; 1880, 116 acres.

was in Sauk county that the business first began in earnest, and throughout, Sauk was far in the lead, even raising nearly half of those grown in the state. In 1868 Sauk county raised six thousand acres of hops, Dane county six hundred fifty acres. The location of the hop district is told in the *Madison Democrat* for June 29th, 1868: "We believe it is well settled that Kilbourn City is the greatest primary hop depot in the United States, perhaps in the world. The region that markets and ships its hops here raised last year about one-fourth of all raised in the United States, and over two-thirds of all raised in this state. . . . Last fall over twenty-two thousand bales raised in this vicinity were shipped from this depot for which over two million dollars were received."

It seems strange that such a large number of intelligent men should be led astray financially, when the facts could be definitely known which pointed to disaster. Voices of warning were not wanting.⁵¹ Again and again attention was called to the danger from the hop-louse and the equal danger from a fall in prices which in the nature of things had to come, for New York was once more growing hops. But the possibilities were so great that the probabilities failed to gain the attention, each man hoping that his own fortune would be safely made before the crash should come. And although many modest fortunes were made, the annals fail to record a single instance of a hop grower who came out of the affair richer than he went in. What the actual loss was can never be known; it was not alone in store bills and mortgages left on the farmer's hands, but equally important was the change in the system of farming. When the hop industry began, there was already a tendency toward stock raising and dairying, and these beginnings were now to be made anew, while the farmer was not in as good condition to make them as before.⁵² In all too many cases he was a speculator who had staked his last dollar and lost.

⁵¹*Trans. State Agr'l Soc.*, VII, 290. *Wisconsin State Journal*, December 6, 1867.

⁵²*Trans. State Agr'l Soc.*, VII, 420. I have also gathered many of these facts from the men who passed through the experience.

CHAPTER III.

TOBACCO.

Although tobacco is rated as a crop belonging to the later, or diversified period of Wisconsin agriculture, it had its beginning at an early date. The Indians had raised it for a century at least, and it is sometimes held by old settlers that it was from the red men that the notion of growing tobacco in the state originated. This can hardly be proved or disproved; it seems reasonable to suppose that the suggestion might have thus been given, but beyond this the Indian cannot be implicated in the matter. When and by whom, then, was the first tobacco raised in Wisconsin? It is pretty safe to predict that no final answer to the question is to be given. At all events the testimony is abundant and conflicting.

The names most often mentioned in connection with early tobacco growing are those of two brothers, Ralph and Orrin Pomeroy. The facts concerning their history are easily obtainable, and while it seems reasonably certain that they did not raise the first tobacco in the state, they did in all probability raise the first in Dane county, and it was they who gave the industry its permanent footing as a farm crop in the heart of the tobacco section.

It is reported that tobacco was found growing wild on both sides of Lake Koshkonong about 1847.⁵³ This must have been the remains of Indian tobacco patches as the plant is by no means indigenous here. The earliest date claimed for the introduction of the crop is 1838. Hon. E. W. Keyes of Madison, in a letter published in the *Wisconsin Tobacco Reporter*, November 13, 1885, states that his brother Abel brought some seed from Bing-

⁵³ *History of Madison, Dane County, and Surroundings*, p. 331.

hamton, New York, to Jefferson county, Wisconsin, and raised a small quantity of tobacco for home use. This makes it appear that tobacco was introduced here as early as in the Miami valley, Ohio, where it became important long before Wisconsin was reckoned among the tobacco-growing states. The next testimony is contemporaneous and gives the status of the new industry in 1840.

"The resources of the west are continually developing. . . . We are informed that a number of inhabitants on Rock River whose granaries have been filled to overflowing the past two years, and who have found it inconvenient to dispose of their surplus products, have resolved to direct their attention to other means of obtaining profit from the products of the soil. Accordingly, the experiment of raising tobacco has been tried the past summer and has been found to succeed beyond expectation. The growth of the plant was astonishingly rapid, and it was brought to perfect maturity and completely ripened about the middle of August last. Many of the leaves measured three feet in length and twenty inches in width. . . . It has been demonstrated that one acre of land can, with the greatest ease, be made to produce one ton of tobacco. The price of one ton at twelve cents per pound would amount to \$240. The cost of preparation and manufacture after the crop is gathered is estimated at three cents per pound. . . . The allowance for sowing and cultivation cannot possibly exceed three cents per pound.

"We understand that the prospect of success in the raising of tobacco is regarded in so flattering a light that arrangements are making for engaging extensively in the business the coming season, especially in that section of the country on the Pecatonica and on Rock River, between Beloit and Rockford."⁸⁴

The interest in this quotation lies principally in the reasons given for launching into the new business. It was a question of transportation: the granaries were full. The price of tobacco was then high and continued so for a long time, and it seems strange that after once getting the idea definitely in mind to raise a crop comprising more value in less bulk, that wheat continued to hold first place for more than a score of years. Tobacco, though for a long time insignificant in quantity, was not wholly

⁸⁴ *Wisconsin Enquirer*, September 16, 1840.

dropped. It sometimes happened that assessors failed to get statistics, because there was so little tobacco that neither they nor the farmers thought to list it as a farm crop, but a series of discussions and guesses as to the early history of the plant brought out the fact that it had persisted almost from the beginning of Wisconsin farming. Again, we have some light shed on the method of initiating the crop into western society.

" . . . Elias Hibbard (grandfather of the writer) settled at Troy, Walworth county, in 1843. In 1848 he obtained from Connecticut two professional or expert tobacco raisers whom he set at work cultivating the weed. . . . Tobacco was raised on that farm continuously and throughout that section from 1844 to 1866, when prices were so low, and nearly every farmer with two, three, and sometimes, five crops on hand discontinued the business as there seemed to be no market for the stuff. . . . We raised tobacco for years before it was ever thought of in Stoughton."⁵⁵

Although not so stated, it is reasonable to suppose that the seed, as well as the growers, came from Connecticut, but this is of small consequence, since the tobacco raised in New York, Pennsylvania, Ohio, and Connecticut was approximately of the same variety.

Mention is made from time to time of small quantities of tobacco raised, usually for home consumption, and so far as testing it goes, the possibility of success was pretty early established.⁵⁶ Little more was said about the matter during the wild scramble for fortunes in wheat, but in the early '50's, when that crop failed both in quantity and price, the tobacco experiments were renewed. Dodge, Kenosha, and Jefferson counties reported small quantities of tobacco in 1851, and in the latter county one farmer estimated that at six and eight cents a pound he could clear forty dollars an acre above expenses.⁵⁷ These were feeble beginnings, and the conservatism and inherent difficulties attending the establishment of tobacco as a crop stood no show of being overcome in the face of the momentary boom of wheat

⁵⁵ *Wisconsin Tobacco Reporter*, February 1, 1895.

⁵⁶ The experiment of raising tobacco in Wisconsin has been tried this season, and succeeded beyond expectation.—*Niles' Register*, LIX, 80 (1840).

⁵⁷ *Trans. State Agr'l Soc.*, I, 239; *Wis. Farmer*, IV, 22; *Pat. Office Rept., Agriculture*, 1851-52, p. 465.

prices in 1854. It did, however, seem in a fair way to gain a foothold till in 1858 an early frost all but ruined the crop, and in the following year less than nine thousand pounds were raised. The number of acres is not obtainable but that amount ought not to require above eight or ten acres.

It was not till 1853 and 1854 that tobacco found the spot destined to be its favorite in Wisconsin.⁵⁸ It was at the time that the Pomeroy, above mentioned, came from the Miami valley, Ohio, where members of their family had introduced tobacco culture some fifteen years before. This venture in Ohio had proved an unqualified success, and these young men brought with them the thorough knowledge of the business requisite for making a similar record here.

"It was in March, 1853, that Ralph Pomeroy came to Madison from the Miami valley, Ohio, where Pomeroy had previously grown tobacco. In company with J. R. Hiestand they rented ten acres of land of Hiram Hiestand, five miles south-west of Madison on Syene Prairie, at five dollars per acre. The field was planted with the old Connecticut seedless variety. The crop was a fine one—very large growth; estimated to yield at least a ton per acre. To cure the crop they built a two tier pole shed, in the then Ohio style, and borrowed rail fence enough to hang it on with twine, instead of lath [as] at present. . . . The first storm after the crop was harvested drove the shed flat upon the ground, while the rain washed sand down the hill and nearly covered the tobacco. . . . The tobacco was stripped and sold to Dewey and Chapin of Janesville at 3½ cents per pound. . . . This was undoubtedly the first tobacco ever marketed in the state. . . . The next season [in 1854] they [Ralph and Orrin Pomeroy] raised their first crop of tobacco in Rock county."⁵⁹ That this was the first tobacco marketed in the state is hardly true but the error is unimportant.

We have, then, the independent introduction of tobacco growing by people from at least three different states, yet it would seem that the reasons for attributing its success to the Ohio peo-

⁵⁸ However, there had been one attempt by a Connecticut man to raise tobacco near Lake Koshkonong (which county of the three bordering the lake is not stated) in 1851. It grew well, but was lost in curling. See *Wisconsin Tobacco Reporter*, September 25, 1885.

⁵⁹ *Wisconsin Tobacco Reporter*, October 21, 1885. See, also, issues of December 5, 1879; August 24, 1883; November 23, 1894.

ple are fairly good. It was the Ohio immigrants who happened to enter the section best adapted to tobacco growing; it was they who persisted in its culture through adverse circumstances; and it was in their communities on "Tobacco Prairie," "Wheeler Prairie," and "Albion Prairie," that the first considerable quantities were raised. It was from these neighborhoods that tobacco culture spread among the Norwegians who have ever since been its principal cultivators.

During the next ten years the same little farce was played again. In 1860 the price was high and it seemed that tobacco was going to be raised in considerable quantities, but again the price of wheat came to the rescue, and the farmers were saved from prosperity. The shutting off of the southern supply of tobacco created a new demand on the northern grown crop but this was no greater comparatively than the increased demand for almost all other farm products. There was a tendency to quit wheat and go into tobacco, but the expense of building sheds, and the question of the required fertilizers were hindrances,⁶⁰ and by the close of the war the prices had dropped again. This depression was of short duration and by 1868 the sixteen to twenty cents a pound—in depreciated money of course—was sufficient to coax the growers into new ventures.⁶¹ All went well for two or three years, but in 1871 the price slumped to one-third of that of the year before, and remained below remunerative figures for an entire decade. The acreage naturally declined, reaching low water mark in 1876, when Dane county had hardly more than is now planted in a single town. Again, the new decade opened auspiciously. The price climbed steadily upward and the acreage increased correspondingly, until in 1883 the unprecedented price of a quarter of a dollar a pound was paid by a few reckless buyers. Within the next two years the acreage had doubled. Men who knew nothing of the business beyond the startling fact that more than three hundred dollars had been made on a single acre in one year, became growers on a large scale.⁶² The beginners always produce a poor quality and are thus a constant menace to the business; but, seeing their neighbors reap more profits from

⁶⁰ *Wisconsin State Journal*, April 20, 1864.

⁶¹ Pat. Office Rept., *Agriculture*, 1871, p. 405.

⁶² *Wisconsin Tobacco Reporter*, February 15, 1884.

a ten acre lot than they themselves had received from a quarter section, it is little wonder that a large number were willing to stake their holdings on the lottery.⁶³ The inevitable happened: over production, poor quality, disgust—and the year 1886 saw the quantity reduced as abruptly as it had been increased. The price began at once to recover, and at a fair level remained remarkably steady for half a dozen years. The acreage responded, but in a modest manner, and it was fourteen years before the mark set in 1885 was again touched. It was under this steady, but solid growth that tobacco won a permanent and dignified place in Wisconsin husbandry. Yet for the fifth time the middle of the decennial decade brought a depression. The prices in 1895 were only about half as high as in 1890 and the acreage followed approximately the same ratio. As in each of the other decades the closing years brought a gradual recovery and at the end of the century the price was high and the acreage twenty-five per cent. beyond that of the preceding prosperous periods.⁶⁴

It is a remarkable fact that with all the excitement over the increase and spread of tobacco culture it is confined to a very limited area. In 1898, approximately a quarter of the entire crop of the state was raised in the four southeastern towns of Dane county; in 1899, these towns raised a fifth of the entire crop of the state. Had it so happened that the southeastern quarter of Dane and the northern part of Rock had fallen within the lines of one county as it might easily have done, a full half, or even more, of the Wisconsin tobacco crop would regularly be reported from a single county. The question of accounting for this has met with varying solutions. Is it a social question? Manifestly not; for as we have seen before there were plenty of men from tobacco growing states other than Ohio, scattered over the southern part of Wisconsin, who began the culture of the plant. Neither can it be explained on the basis of Norwegian settlements, for there are plenty of these industrious foreigners in other parts of Dane county and of the state. The slight differences in climate are wholly inadequate to settle the matter, so we are, perforce, driven for the explanation to the other main element in agriculture, viz.:—the soil. It may be seen by comparing a geological map of the United States with a map showing

⁶³ *Wisconsin Tobacco Reporter*, February 20, 1885.

⁶⁴ Tables showing acreages and prices will be found at the end of the chapter.

the tobacco areas that the limestone valleys and the tobacco districts in a rough way coincide. This is particularly true in Massachusetts, New York, and Ohio. Southern tobacco need hardly enter into our discussion, since it is of an almost entirely different quality and does not compete to any serious extent with the northern grown leaf. Northern tobacco, it may here be stated, is valuable for its leaf primarily. It is used in making cigars, and the size and texture and color of the leaf are of much more consequence than the flavor. To produce those qualities the soil must be rich, and of such a nature as to permit a very rapid growth in a latitude so high that the summers are but about three months between the frost dates. The quality of soil best for tobacco is discussed at length in the tenth Census Report and the statements there made are fairly well borne out by the subsequent history of the crop. The leading tobacco journal of the state sums up the matter of soils about as well as it can be done in a few lines:—

"There are three classes of soils recognized by the tobacco growers of Wisconsin. First, the calcareous sandy; second, clayey soils, light and dark, and third, prairie soils. The first produces a plant that matures a week or so earlier than the others; the leaf is apt to be light in color, elastic, thin, and silky. On quite sandy soil the leaves often grow rough, lack tenacity and very often [are] devoid of the main essential, gum or finish, as it [is] more commonly called. Clay soils varying from light to heavy grow a good quality when not too heavy, and well drained. The timber growth of this soil with a hazel undergrowth, after the second or third crop, will produce the very finest quality of leaf grown in the state. On heavy clay the tobacco seems inclined to grow too thick and coarse. The third class of soils, prairie, produces by far the greatest proportion of Wisconsin leaf. It is naturally rich, deep and black, and when well drained, as most of it is, the very best results are obtained. . . . The soil lies loose and requires less cultivating than clay soils and is less liable to wash. The largest yields per acre are obtained from prairie soils."⁶⁵

"A rich sandy loam is probably the best, and as color is something of an index to quality, a soil that is of a brown or grayish

⁶⁵ *Wisconsin Tobacco Reporter*, March 13, 1885.

cast is to be preferred. But whatever the color or quality of the soil, if it is thin and lies upon a cold subsoil which is saturated with water until late in the season it is useless for tobacco, for the plant will not grow with a chill at its roots."⁶⁶ This brings out the fact that tobacco land cannot be chosen by a novice, and that even the best of judges depend more upon experiment than upon any preconceived notions. It would seem to the writer after an extended trip through the tobacco district that the above observations as to the color of the soil are hardly warranted, and that more stress might be laid on the excellence of the "sandy calcareous" soil.

The different classes of soils here enumerated are not mutually exclusive, for some of the prairie is also of a calcareous nature, and when this happens to be the case it no doubt constitutes the choicest of tobacco land. Within the limestone area of Wisconsin a more specific classification of tobacco soils can be made. Of the four principal limestone soils, two are used for tobacco growing: the Trenton, and the Lower Magnesian. These soils have more friable loam than is found in the higher and more rugged Galena limestone and are better drained and richer than the Niagara limestone. Neither the Potsdam nor the St. Peters sandstone districts have become important in tobacco production.

ROTATION AND FERTILIZATION.

Shall tobacco be raised for a long number of years on the same ground or not, is a question that growers are still asking rather than answering. So far as practice goes there cannot be said to be at present any regular system of rotation. Tobacco land requires so much manure, and the manure used is of such a crude kind that it would be folly to attempt the preparation of a new tobacco plot every year or two. It is no small undertaking to get a piece of ground ready for tobacco, as can be easily understood by any one who comprehends the high state of tilth and fertility to which it must be brought. Tobacco of good quality can be raised on the same land year after year, and the cumulative effect of the manure makes it possible to produce a given quantity with less expense than where a new piece is taken

⁶⁶*Wisconsin Tobacco Reporter*, May 13, 1892.

each season. The amount of manure used varies greatly, but it is safe to say that very few farmers who grow tobacco put fertilizer on any other field, and for the most part, they "buy, borrow, and steal" every available load for miles around. A wagon load is a very indefinite quantity but it is usually estimated that somewhere from twenty-five to a hundred loads must be put on each acre each year. Thus it often happens that the cash expenditure for manure is ten, twenty, or thirty dollars per acre, while the labor of getting and applying it would amount to an equal or greater sum. Commercial fertilizers have not been used in any important quantities, though their qualities and cost are often a subject of debate. Wood ashes are always in demand, as it has been found that they have a good effect when mixed with other fertilizer. The value of ashes lies, of course, in the potash which they furnish and this is of consequence in growing a crop which produces a great quantity of leaf. The same principle explains the preference of tobacco growers for horse manure, it being rich in phosphates which are also needed in growing a leaf crop. The result of this heavy fertilization is that the soil becomes surfeited with nitrates, by far the most expensive plant food, yet these ingredients in excess usually are unfavorable to grain or grass. Another important reason for keeping tobacco on the same ground year after year is the freedom from weeds of a piece of land where it has so long been sure death for a weed to show its head. In many old tobacco fields the plowing and other cultivation done in the spring and again in the late fall keep the weeds so thoroughly subdued that little trouble is experienced during the short growing season of mid-summer.

For a long time it was believed that no system of rotation was needed and even yet an occasional field may be found where tobacco has been raised continuously for fifteen or twenty years, and very many of them where no break has been made in its tenure for a decade. But in general it may be said that six or eight years is as long as it is kept on a single plot, and since few growers have been in the business longer than the extent of two such periods there can be little said of the tendency to turn a piece of land back into a tobacco field after it has once been changed to something else.

It is within the past ten years that the question of rotation has come to be seriously considered and then only in a tentative

way. Occasionally a tobacco grower asserts that proof is available to show that more rotation will result in better crops. "Instead of planting the old fields again try a fresh field. If the grower has not a piece of cleared woodland, try the pasture lot or any rich land that has never before been into tobacco. The most satisfactory results, however, have been obtained from woodlands that have been cleared and the virgin soil has yielded some beautiful tobacco. It is the fresh soil that gives the open grain leaf, so much in demand at the present time."⁶⁷ Yet as late as May 13, 1892, the same writer had given advice the very opposite of this: "Equally fine crops have been grown on land upon which tobacco has been raised after tobacco for a series of years, and if you have a small piece of land such as is described above,⁶⁸ better results will be obtained by keeping it in tobacco year after year, fertilizing it highly, than to change."

Almost without exception corn is the crop to succeed tobacco, and unless it be in very dry years the yield is remarkably large. The abnormal amount of nitrogen in the soil is taken care of by the corn and there is not the danger of an excessive growth of leaf and stalk, which would almost certainly prove the ruin of a crop of small grain. Corn is usually planted on such ground several years in succession, and then clover or grass, though small grain may be introduced earlier in the series if the nitrates seem to be sufficiently reduced to warrant it.

With such a plethoric condition of an old tobacco field in mind, it is hard to convince any man who wants to grow tobacco that the crop is one which exhausts the soil. Almost without exception the growers claim that tobacco takes less from the soil than do potatoes, or corn, or wheat, arguing that the leaves draw their substance principally from the air. No doubt they have heard that leaves do get their carbon from the air, but carbon has little in common with nitrates, phosphates, and potassium compounds, and the man who can show that these substances are taken from the air directly by tobacco will be entitled to a rare medal. A few comparisons tell the story:

⁶⁷ *Wisconsin Tobacco Reporter*, March 13, 1896. More testimony, March 20 and 27; also same for July 6, 1894.

⁶⁸ See quotation of same date on page 97f.

ARTICLES.	CONTAINING PER CENT. OF:		
	Nitrogen.	Phosphoric Acid.	Potash.
Meat	2 0	1.2	0 2
Cheese	4.0	0.3	0.5
Butter*	trace.	.....	.....
Potatoes	0.25	0.18	0.5
Grain	1 75	0.8	0.5
Tobacco	4.53	0.415	5.594

*It takes bad butter to contain more than one-half per cent. of "nitrogenous matter," and this will have a very small percentage of nitrates. At the Wisconsin Experiment Station it has been estimated that five cents' worth of fertilizer is lost in the butter made from one cow in a year.

No one denies that raising grain year after year upon a farm will eventually reduce its fertility, even cheese has the same tendency, while butter has the least to answer for in that regard of any important farm product. There is more plant food taken from the farm in one ton of tobacco than in a hundred tons of butter, or, there is as much plant food taken from a single acre of tobacco in a year as will be carried off in all the butter that can be produced on the largest farm of Dane county.

It may as well be acknowledged that tobacco is a crop that keeps up a continual drain on the soil, and facing this proposition, consider whether or not it pays. The fact that the soil in the tobacco district is as rich, or richer, than in other parts of the state is not a pertinent argument. It is due to two causes: First, the soil in this district is the best in the state; second, the tobacco growers have exerted themselves to the utmost to keep it up to a high standard; they have utilized the available fertilizers to an extent unknown in other sections. But the test is one that cannot be made in a few years, and much more intelligent judgment can be passed on the matter after the duration of tobacco culture can be reckoned in quarter-century periods than now when it is a matter of only a fraction of that time. From the experience of the old tobacco states but one conclusion can be reached: Tobacco is an exceedingly exhausting crop, and the question of keeping up the fertility of the soil is an ever-present problem.

After all, the area planted to tobacco is small; in Dane county it is only about ten per cent. of the acreage once sown to wheat, and when the whole state is considered it drops to a small fraction indeed. In the towns where the most is raised the ratio to the whole area has never equalled one to ten; yet the most enthusiastic tobacco men are continually advising the grower to plant less, and not more. A prominent tobacco dealer of Stoughton who was for years engaged in growing tobacco on his own land estimates that five acres is as much as can profitably be grown on an eighty-acre farm. This would allow but 1,440 acres in a town were it equally distributed over the entire extent, but such a distribution can never be made, and in order to reach that amount in the aggregate many eighty-acre farms produce twenty or more acres each year. In 1893, with an acreage very much less than at present, and with prices almost as good, our tobacco editor, so frequently quoted, is eloquent in his appeal to his constituents to go into dairying as a means of keeping up the fertility of the tobacco fields, especially as an antidote to over-production, against which, as an imminent catastrophe, he forever warns them.⁶⁹

METHOD OF CULTIVATION AND PREPARATION FOR MARKET.⁷⁰

In the first place the ground must be in process of preparation some months in advance. A few years ago it was customary to plow once in the fall and twice in the spring, but at present one plowing is considered sufficient, and this is done but a short time before planting. If tobacco has been raised on the land the previous year some mode of cultivation to prevent a second growth is desirable, and a disc harrow is a satisfactory tool for the work. Manure is spread upon the ground any time during the fall, winter, or spring. Occasionally a top dressing is applied after the ground is plowed, but does not seem a very popular method. One of the most important considerations of the whole process of tobacco growing is to have the ground in good shape before the crop is planted. It must be mellow and warm.

The seed bed is the next care, and much depends upon the

⁶⁹*Wisconsin Tobacco Reporter*, December 15, 1893.

⁷⁰A careful account of this is given in the Tenth Census Report, but great changes have taken place since that time.

skill with which it is prepared and tended. Much theorizing and experimentation have been done in this connection, but in a general way it may be said that the best results are obtained from an outdoor bed made in some sheltered spot as soon as the weather will permit in the spring. It was at one time thought of great consequence to burn some brush on the bed in order to destroy weed seed and animal life in the soil, but this is practiced very much less of late. As early as the danger of hard freezing is past the seed, which has already been sprouted, is sown in the bed, and canvas is stretched over it as a protection against wind and frost. The seed used should be entirely free from weed seed, as all weeds must with scrupulous care be kept out, and it is difficult to pull any great number of them without injuring the small and tender tobacco plants. When the little plants are about two inches high the cloth covering is taken off and they become toughened somewhat by exposure to the sun and wind. It is of great importance to have them ready for setting at the first moment the weather seems to permit, which is usually during the first half of June; they must be large enough to handle and if they are kept in the bed long after the proper size—from three to five inches in height—is reached they lose rapidly in vigor.

Transplanting has been greatly simplified by the invention of the machine for doing the work. As in the case of the grain binder, this machine came at a time when there was great demand for such a device on account of the increased quantity produced, the high price paid for the product, and the extreme difficulty of getting the requisite amount of desirable help at the critical moment. The first trial recorded in Wisconsin took place at Janesville in 1885, the machine being the invention of Mr. Maurice Smith of Farley, Iowa.⁷¹ Although many improvements have since been made, the description of this first machine gives a good idea of those now in use:—

“The machine proper is a carriage having attached in front a roller, and just back of that two blades, which together make a small furrow in the ground and throw the earth to one side. Two boys sitting just behind these blades drop the plants about

⁷¹ Another transplanter much in use was invented by Mr. F. A. Bemis of Lodi, Wisconsin.

thirty inches apart, with the roots lying in this furrow. A scraper under the boys throws loose dirt over the roots, and a wheel on the back of the truck presses down the loose dirt. The attachment for watering the plant is a box set on the axle, a hose leading from the box to the ground, and a valve opened and closed by an eccentric on one of the large wheels. It works very well, and instead of soaking the surface, waters only at the root of the plant. With boys accustomed to feeding, the plants should be set very well, and it is said that a man and two boys, with this machine, can set as many as eight or ten can by hand. The great beauty of the setter, however, lies in the fact that when the farmer has his field ready, he can go right ahead and put out the tobacco, not having to wait for rain. With this alone to recommend it, if some automatic feed can be arranged, the invention will be an invaluable one for the grower.—*Janesville Gazette*.”¹²

The automatic feed has not yet been provided and the tobacco planters seem well satisfied with the machine as it is. One of the most gratifying features of the transplanter is the manner in which the watering is done; the water is applied at the roots of the plant and the fine dry soil, gently pressed down by the wheel at the rear, seldom results in “puddling,” which so often gave trouble when the setting and watering were done by hand.

A writer in 1881 called the hoe “the most important implement in the tobacco field,” for at that time the greater part of the cultivation was done in that primitive way, but by 1885 the hand hoe was almost entirely put out of business by the horse hoe. At present the usual practice is to go over the field once by hand to cut out the few weeds missed by the cultivator, but this is a light task. The horse cultivator is put at work almost as soon as the plants are set and there is little chance of using it too often up to the time the leaves are in danger of injury. Tobacco grows rapidly, sometimes being ready to harvest in less than two months after planting, and there is little time to be lost, for unless it be kept moving along at a swift rate it is likely to be caught by the frost.

Topping is done just as the blossom is forming, and suckering and worming keep the farmer busy till time for harvest.

¹²*Wisconsin Tobacco Reporter*, July 24, 1885.

Pruning, i. e., removing the lower leaves during the growing period, has been discontinued. Harvesting is done rapidly as there are but a few days from the time the crop is ready until it begins to lose in quality. All members of the family work early and late until the last load is in the shed. The women and girls do the cutting, the small children the piling, the boys string it on lath, and the men haul it to the shed, the whole process being done in a single day when the weather is favorable.

It is after the crop is in the shed that the real trouble begins.⁷³ Pole-rot, shed-burn, strutting, etc., etc., keep the owner on the anxious seat till at last the stripping and sorting is done, the crop sold, and the money in his pocket. The cost of raising is estimated roughly at sixty or eighty dollars per acre.

VARIETY AND QUALITY.

The variety of tobacco grown is almost entirely the Spanish, the "seed-leaf" going out of favor with the decline in price during the '80's, since which time very little of it has been planted.

Wisconsin growers have never been able to produce as fine an article as is grown in the eastern states. In 1879, New England tobacco graded fifty per cent. wrappers, Wisconsin less than thirty per cent.; in 1889 the percentages⁷⁴ were about the same, and they have not changed materially since. Nor is this all; the Wisconsin wrappers invariably sell at half, or less, than wrappers from Connecticut; in fact, a considerable share of "Wisconsin wrappers" are not wrappers at all but sell as "binders."

THE TARIFF ON TOBACCO.

Whether or not the tobacco industry is still an infant, it has required as tender nursing by the politician as by the farmer, and shows no symptoms of being able to stand alone. It was the tariff of war times that gave the industry its first importance, and with all the discussion as to seed, and sheds, and land, and labor, the tariff has continued to be the *sine qua non* of tobacco culture. In

⁷³The shed is usually twenty-six feet wide and sixteen feet high. Every fourth board is hung on hinges for ventilation. A shed of this height holds four tiers besides those hung in the gable; twenty to twenty-four feet in length holds the crop from one acre, and costs about one hundred dollars.

⁷⁴*Wisconsin Tobacco Reporter*, May 22, 1891.

1882 petitions were sent to congress asking that the tariff on Sumatra leaf be raised from thirty-five cents to a dollar a pound. In 1884 it was predicted that, in case the proposed reduction of twenty per cent. on import duty should pass congress, tobacco growing in Wisconsin would become a memory.⁷⁵ In 1890 the Sumatra wrappers were taxed two dollars a pound and the Wisconsin growers complained that it had not been set at two-fifty or two-seventy-five in order to protect them against the product of slave labor of the Orient. A small cut in tariff rates under the Wilson Act, in conjunction with the powerful stimulus to over-production just preceding, worked havoc with prices, and a new application of the beneficent remedy was demanded. The Milwaukee *Sentinel* in 1894, commenting on the depression in the tobacco trade, took occasion to remark that dealers and growers were principally Scandinavians and Americans, with a small sprinkling of Germans and Irish, but they were alike in one respect—all Republicans—and adds that it would be strange were they anything else, for the tobacco industry would soon become a thing unknown without protective tariff. A little before this a tobacco grower in addressing a Farmers' Institute remarks that "if the present policy is continued it will be only a short time till the bottom is completely knocked out, and with the present free trade tendencies of the times . . . the prospects of the tobacco growers are not overloaded with rainbow tints." But during the Spanish War the growers had conscientious scruples against letting "the constitution follow the flag," and in a memorial to congress protesting against annexation of any islands, solemnly resolved that: "a government can only derive its just powers from the consent of the governed." The last note in this politico-economic refrain was sounded at a convention at Janesville, October 31, 1901, where it was resolved: "That it is expedient for the tobacco growers of the state of Wisconsin to form a State Association, whose head-quarters shall be at Madison or Edgerton, and whose primary object shall be to unite with other similar organizations in protecting the leaf industry of the state."⁷⁶

⁷⁵ *Wisconsin Tobacco Reporter*, October 17, 1884.

⁷⁶ *Wisconsin Tobacco Reporter*, November 1, 1901.

INFLUENCE OF TOBACCO CULTURE ON VALUE OF LAND.

It is believed by many that the high price of land in Dane and neighboring counties is chiefly owing to the tobacco industry. There is an element of truth in this, but it is far from being all truth. Between 1880 and 1885, the period when tobacco culture made its greatest gains, the price of land did make remarkable advances. On section 20, Christiana, a farm which sold near the beginning of this period for forty dollars an acre was later divided up into smaller lots, and with no improvements, some of the forties sold at a hundred dollars an acre. Numerous instances might be given from which, if taken alone, it would appear that tobacco was responsible for about all the advance in land values for the past twenty years. But it may also be shown that worn out wheat farms in the southwestern part of the country sold as low as ten dollars in the '70's and came up to twenty, forty, and fifty, within the next twenty years when turned into dairy farms.⁷⁷ Moreover, the average value of land in Windsor and Bristol is about equal to that of Albion and Christiana,⁷⁸ yet the former towns have been insignificant in tobacco production. Again, it is instructive to notice the value of land at some distance away; four hundred miles directly west of Dane county, in the northwestern part of Iowa, ordinary farms are selling as high as seventy-five dollars per acre, and it is a half-day's ride on a train to the nearest patch of tobacco. If all these prices are even indirectly the result of tobacco growing the western farmer has no cause to complain of the tobacco tariff. The fact of the matter is that a complexity of causes has resulted in the rise in price.

As to the higher price given for choice tobacco land there can be no dispute, but where the land is not already in shape for planting, the premium paid for it is not great. It takes very little figuring to see that a man wishing to go into tobacco culture can afford to pay for the superior richness of the soil which repeated applications of manure afford. A twenty-acre farm with even modest improvements in the way of buildings, and with half, or more, of the land brought up to the highest point of fertility can

⁷⁷As an instance of this a farm in the town of Vermont, Section 25, sold for eleven dollars per acre in 1873, and is easily worthy fifty dollars now.

⁷⁸See chapter on Land Values.

not be fairly compared in price per acre with a dairy farm ten times its size. In the one case the selling price is half contained in the improvements, in the other the improvements make a much smaller percentage. The possibility of a large income from a few acres has induced many foreigners to pay a hundred dollars an acre for small pieces of land, thus getting a home with a small absolute indebtedness.

NORWEGIANS AS TOBACCO GROWERS.

Although in nowise responsible for the introduction of tobacco culture, the Norwegians are the main growers and have been almost from the beginning. It so happened that these people settled in Christiana and Albion at a very early day, and during the years of the great Norwegian immigration there were always great numbers of new arrivals, with large families and no money, keenly on the lookout for an opportunity to earn a living and get homes of their own. Here was a rare chance. They could buy a small piece of land on time, or become "sharemen"⁷⁹ and plant some one else's land to tobacco, the landlord furnishing all the capital; the tenant doing all the work; and each getting half the crop when ready for the market. This was an especially good thing, in view of the fact that a large part of the labor required in growing tobacco is such as can be done by women and children. The Norwegians knew nothing about tobacco culture before coming here, but they soon became experts, and the same reasons that turned their attention in this direction at first have kept them in the business. Their standard of life was frugal; few comforts, fewer luxuries, rigid economy, and hard work have brought many of them up from poor sharemen to owners of hundreds of acres. The Americans who grow tobacco usually plant a few acres on a larger farm, while the small farms, which are the distinctive tobacco farms, are held by Scandinavians.

APPEARANCE OF THE TOBACCO DISTRICT AS COMPARED WITH OTHER PARTS OF THE COUNTY.

In its general appearance the tobacco district is striking. It takes some persuasion to convince one who has ridden through

⁷⁹This term seems to be peculiar to this locality.

other parts of the county toward the tobacco section that he is coming to land worth a quarter or a half more than that which he has been viewing.

In the dairy and general farming districts the houses are large, well painted, often as fine in appearance as average city residences, the barns have a capacious, substantial look, and the whole homestead gives the impression of prosperity and comfort. In the tobacco section the houses are little more than a story in height, and are often in poor repair; there can hardly be said to be any barns, and the omnipresent tobacco sheds are seldom painted or shingled. Nor is this all; the crops, other than tobacco, present rather a neglected aspect. At the time of my visit, when almost every acre of corn in other parts of the county was in the shock, and the fall plowing well under way, there was not a quarter of the corn in the tobacco district cut, and hardly a furrow of the stubble ground had been turned. This was as late as September 20th, and the corn was long past its best as a fodder crop, though the tobacco farmers expressed themselves in favor of late-cut corn. Mr. F. A. Coon of Edgerton writes of the tobacco crop: "It is a great monopolist of manure and attention. If any crop is neglected it is not the tobacco crop. That must be cultivated and fertilized even though the corn is wrapped in grass, or the hay crop suffers for want of cutting, . . . it is usually the petted crop." This testimony is from one of the strongest friends of the plant, yet it can be duplicated at pleasure, and any observer who does not happen to approve of the business will express the same sentiment in stronger terms. It is not denied that many men have become rich growing tobacco, but it is by no means self-evident that they have done better than their neighbors who have farmed on other lines; they, too, have grown rich, as wealth is counted among farmers. Often, side by side, two farmers have lived for twenty years, the one growing tobacco continuously, the other raising corn and cattle, and as they are both about to retire it is remarked that one is worth as much as the other and the opportunities have been equal. This proves very little either way, but it does seem to show that there are as great possibilities in ordinary farming and dairying as in the much-lauded tobacco farming.

The poor appearance of the tobacco district is partly explained by the system of renting land out in small tracts and putting up

buildings merely good enough to answer the purpose. It is also urged that many of the tobacco growers began with nothing and cannot be expected to pay for such high-priced land and put on good improvements all within a few years. There is some truth in both of these arguments, but the fact remains that the other parts of the county have more of the appearance of permanent prosperity. A system of farming which encourages investment in land for the hopes of big returns and no work, as seems to be the case where land is held by a man living in town, and let out to sharemen, can hardly be commended from either an economic or a moral standpoint.

ACREAGE AND PRICES.

For the following tables no minute accuracy is claimed. The acreage figures are taken from statistics given in the reports of the secretary of state; they were compiled from the assessors' books, made out in May of each year, and, therefore, based on estimates of what was intended to be planted. The census enumerators invariably find more acres than do the assessors, and this is hard to account for unless it be that there is less reserve on the part of the farmer in dealing with an officer whose duties are of a scientific nature and in no wise connected with taxation. No doubt there are many inaccuracies in the best of these figures, as tobacco fields are so often small and irregular and seldom accurately measured. There are still greater difficulties in getting representative prices. Each year there is some tobacco which sells for a cent or two a pound, and any attempt to average such extremes is useless. The prices given are for good grades, the highest prices are not quoted and the very lowest are not considered at all. For the years previous to 1870 the data are very meager; since that time price lists are abundant. The average given for 1862-1865 is an estimate made by a government statistician. However, the table is sufficiently accurate to show the general tendency of prices over the main tobacco period.

Prices and Acreage of Tobacco in Dane County, 1840-1901.

(Compiled from reports of assessors and census enumerators.)

Year.	Price per pound.	Acreage.	Year.	Price per pound.	Acreage.
1840.....	\$.12	.....	1879.....	\$.065	4,331
1851.....	.07	.....	1880.....	.085	6,240
1852.....	.13	.....	1881.....	.105	.....
1853.....	.07	10	1882.....	.14	.....
1859.....	.....	8,997*	1883.....	.18†	6,220
1860.....	.12	.....	1884.....	.17	.....
1861.....	.....	.....	1885.....	.15	12,167
1862.....	.12	.....	1886.....	.08	6,500
1863.....	to	.....	1887.....	.10	7,758
1864.....	.13	.....	1888.....	.11	9,361
1865.....	.....	.....	1889.....	.11	8,045
1866.....	.....	86	1890.....	.10	9,388
1867.....	.....	.....	1891.....	.10	10,234
1868.....	.18	.....	1892.....	.10	10,968
1869.....	.125	229,568*	1893.....	.09	10,436
1870.....	.175	.....	1894.....	.09	8,729
1871.....	.06	.....	1895.....	.055	6,789
1872.....	.06	.....	1896.....	.065	5,997
1873.....	.06	.....	1897.....	.09	9,974
1874.....	.05	.....	1898.....	.065	11,338
1875.....	.035	1,929	1899.....	.07	12,638
1876.....	.065	1,454	1900.....	.11	15,091
1877.....	.075	2,459	1901.....	.11	14,365†
1878.....	.075	2,044			

*Complete returns were not available for the early period of tobacco raising. These numbers represent the number of pounds produced in entire state. The acreage relates to Dane.

†A few sales were made at \$.25.

‡This was the estimate made by assessors, but it is probably 40 per cent. too high, as much planting was prevented by the drought.

CHAPTER IV.

THE DAIRY INDUSTRY.

As in most new countries, dairying in Wisconsin was slow in getting a start. The first American settlers almost invariably brought one or two cows with them and were thus more or less well supplied with milk and butter. The foreigners just as invariably brought no cows, and it was often some years before they were able to buy them. As a consequence butter was always scarce and usually dear throughout the first twenty years, unless it was for a few weeks during midsummer, when the weather would not permit the producer either to ship or hold it for a better market.

A glance at the prices paid⁸⁰ makes it clear that a single pound of marketable butter was often worth more in Madison than a bushel of wheat, yet with a small investment in cows it was entirely possible to turn the produce of an acre into seventy-five pounds of butter instead of eight or ten bushels of wheat, and the cash outlay for maintaining the dairy after once it was started was not equal to the expense of raising wheat. In spite of these possibilities, and they were thoroughly tested,⁸¹ butter and cheese were shipped from other states to Wisconsin even as late as 1860, while for half or more of the farmers to buy butter, cheese, and even milk was so common as to excite no comment.⁸² The usual answer to the query, why was this so, is that farmers were too poor to buy cows and build barns; they had no good place for

⁸⁰ See table at the end of this chapter: prices of wheat at the end of the chapter on wheat.

⁸¹ *Trans. State Agr'l Soc.*, I, 239: III, 50; Pat. Office Rept. *Agriculture*, 1852-53, 320.

⁸² *Wisconsin State Journal*, August 22, 1857.

making butter, and besides, butter could not well be shipped a thousand miles with the transportation facilities then available. Let us see: A cow was worth about twelve dollars in 1848 and hardly double that within ten years following. The plea that barns could not be provided was nonsense, yet some farmers argued that cows hardy enough to stand winter weather must be had before dairying would succeed. True there were not the best of opportunities for taking good care of butter during the hot weather, but cheese could be made instead, and that would stand shipping to the eastern market. During the cool part of the year butter could be handled without loss, and the cost of sending it from Milwaukee to New York was only about a cent a pound, that is from five to ten per cent. of its value, while wheat at a little less per pound for freight could not be carried to New York short of twenty to forty cents per bushel during a long period of years, and this was seldom less than a third of its value, sometimes indeed absorbing the whole.⁸³

Of the few farmers who did go into dairying during the wheat period there seems to be not a single adverse report given; even with indifferent management a dairy at that time was bound to succeed. Occasionally a man kept an account of his receipts from sales of butter and cheese,⁸⁴ and though the amount produced was small these were the few farmers who were not in debt at the stores; they were the only ones who believed that tame grass and clover would succeed. During the summer months cheese was made at home, for there were no factories, and where one family had not milk enough for a cheese of respectable size, several neighbors would "change milk," one making a cheese one day and another the next, out of the combined supply. This may be called the germ of coöperative cheese factories. In this primitive way a fifteen-dollar cow on four acres of land worth from two to ten dollars per acre could be made to produce from twenty to forty dollars per year; not a bad percentage, even though the necessary labor, otherwise expended in futile efforts to raise wheat, had been reckoned at the outside figure.

These were the conditions up to 1860, and it cannot be said that they changed much during the war, although prices were high;

⁸³*Trans. State Agr'l Soc.*, III, 50.

⁸⁴*Ibid.*, I, 133, 167.

but by 1870 the tide had turned, the census of that year showing the product of Dane county to be about a million and a quarter pounds of butter—a gain of 33 per cent. within a decade. There is no occasion to dwell upon the reasons for giving so much attention to dairying at that time: it was a mere turning from a dead industry to a live one, from a process which was fast sapping the soil of its remaining fertility to one which would slowly but surely replace the needed richness. From 1870 to 1880 prices were low and the increase in butter production was small.

With cheese a remarkable change had taken place. In 1870 the quantity of cheese was less than one twenty-eighth that of butter; in 1880 it was almost one-sixth. This gain was due to two principal causes: first, the relative price of cheese was high, and second, the Swiss people from Green county spread over into Dane and engaged in cheese making, since which time cheese has steadily taken a more important place. During the '70's cheese factories were established in nearly every town; there were two in Bristol, two in Dane, one in York, one in Blue Mounds, etc.; but by 1880, or soon after, the most of these were closed for want of patronage and the cheese and butter industries instead of running side by side in direct competition began to localize themselves with respect to physiographic areas. It may be shown that Wisconsin is a cheese-producing state because of climatic conditions; it may also be shown that social influences have resulted in localizing the industry, as in Green county, where the map is dotted with Swiss cheese factories; but neither nor both of these reasons can explain satisfactorily why there are thirty-nine cheese factories in the "driftless" area in the southwest part of Dane county and a single one in all the remainder. True this section is near to Green county and the Swiss gradually spread to the north, or at least furnished cheese makers whenever there was a demand for them, but they were equally near neighbors to the southeastern part of the county where the single cheese factory is found. The explanation seems briefly to be this: There is more money in making cheese, especially Swiss or Limburger, than in butter. But on the other hand, the whey is worth almost nothing, while skimmed milk and butter-milk are excellent feed for pigs and calves. In the hilly districts corn cannot be raised in large quantities, hence it is useless to attempt raising large numbers of hogs. With these facts before him the farmer in the

hilly region sees a larger profit in making cheese, and the farmer in the better corn district refuses to patronize a cheese factory at all, and sends his milk to a butter factory. That this is not a fanciful statement of the case may be seen in the following table made from the assessors' returns for 1894.

(DAIRY TOWNS.	No. of hogs.	No. of cows.	Bu. of corn.	Lbs. of butter.	Lbs. of cheese.
Blue Mounds	957	1,509	43,400	166,500	280,000
Vermont.....	406	1,299	24,200	30,300	62,800
Perry	738	2,740	25,700	18,000	400,000*
Primrose	987	893	57,000	8,000	346,900
Total	3,088	6,443	150,300	222,800	1,089,700
MIXED FARMING TOWNS.					
Springfield	1,275	762	96,500	49,000	.....
Bristol.....	1,229	1,116	108,800	148,000	.....
Fitchburg	1,510	802	82,973	39,000	4,500
Rutland	1,121	952	136,700	131,000	.....
Total	5,145	3,632	424,773	367,000	4,500

In these representative towns we find that in the dairy group there are not half as many hogs as cows; in the other group there are forty per cent. more. In the dairy group there is a third as much corn as in the other, and the amount of butter is less than two-thirds that of the mixed farming group, while in the relative amounts of cheese made there is no comparison. The conclusion is that growing hogs and corn is, other things being equal, in the estimation of the farmer, the more profitable industry; but where corn cannot advantageously be raised the number of hogs will be small, and milk not being needed for feed, cheese will crowd butter making out. This analysis would seem to hold good in explaining why Wisconsin is a cheese-making state and almost no cheese is made in Iowa, which ranks high in butter production; but allowance would also need to be made for the more favorable climate for cheese making in Wisconsin. And in general it would be necessary to take the three factors, climatic, social, economic, into consideration before making dogmatic statements

*This item was wanting, but the estimate is certainly a low one.

as to why any particular dairy section makes, or does not make, cheese instead of butter.

The profits of dairying are by no means small. The names can be furnished of men who have gone in debt for high-priced land and paid for it within a few years, getting almost the entire sum from the sale of butter or cheese. One dairy of thirty cows brought in twenty-four hundred dollars in the two years, 1899 and 1900. Others can be cited which have done equally well. The labor involved is of course a big item but here as in tobacco growing the labor is of a cheap kind and is nearly all done by the family. This is an important point. It has never been found profitable to hire much help on a dairy farm; the main part of the work is milking and taking milk to the factory, which is done morning and evening, and the amount of general farming to be done on a dairy farm does not furnish employment for a large force of men. It is safe to say that the major part of this industry is carried on without any hired help at all. Dairying is in the hands of the men with large families—Norwegians, Germans, Irish, and to a less extent Americans. Hardly a dairy can be found, that is, a large one, managed by a man who must depend on doing all the work himself or hiring it done; such a farmer prefers raising sheep, hogs, horses; and once in a while a man whose interest has long been in dairying, finding himself left to do his own work, continues to raise cows, but sells them to his neighbors. There is little to be said against this custom of requiring children to do the work of the dairy; the work is not excessively disagreeable; it is not severe or long continued; it does not interfere with their school work, or take them away from home, or lead to unwholesome surroundings or associations—almost every count of which must be given an opposite answer in regard to tobacco culture.

There are several reasons why dairying has gained so much importance during the past ten years. Instead of the former great fluctuation in the price of butter, it being down below cost of production in the summer and correspondingly high in winter, the price for the past decade has been remarkably uniform for the different months of the year. Winter dairying is common since the obstacles in its way have been overcome. Factory-made butter is of a higher grade than that made on the farm. And furthermore it is possible to put butter in cold storage and keep it

several months without any perceptible change in quality, and the improved equipments in transportation enable it to go to the best market however distant. The whole general average of excellence in dairy cows has been materially raised by processes which make it easy to pay for milk according to the butter it will make, as with the "Babcock Test," and the inefficient and untidy dairyman is still further discouraged by the system of state dairy and creamery inspection in vogue in almost all dairy sections. Expense of manufacture has been, and is still being, greatly reduced by the concentration of the business. The good results to be gained by the system of establishing skimming stations at convenient intervals over the country or by using hand separators, and shipping the cream to some common center where it can be handled by experts and made into gilt-edge butter at the lowest possible cost, is a problem not fully worked out. But there has certainly been an "industrial revolution" so far as dairying is concerned, and it is still in progress. Moreover, dairying is self-sustaining; there is no constant nightmare of over-production, or fear that the addition of a new island to the flag, or the change in the political complexion of congress will pauperize those dependent on its prosperity. To the anxiety of tobacco growers over tariff, and frost, and hail, and drought, the dairyman is almost a stranger.

As to the details of managing a dairy farm little need be said to anyone familiar with dairying in any part of the upper Mississippi Valley. With the exception of a comparatively small number of dairies kept primarily for the sale of milk by the quart, they are all of a plain business-like sort. Little fancy stock is kept, and little fancy or unusual feed used. The cows are a motley lot in color and breed, there seldom being a herd showing much uniformity. In the mixed farming sections the Shorthorns are the most common; in the dairy sections there are more Jerseys, Holsteins, Guernseys, and what not, each cow being chosen for individual excellence, primarily for dairy purposes, yet with the secondary object of producing a fair amount of beef; as to the ratio in which these qualities should be combined there are about as many opinions as farmers. The feed of the dairy cow is grass in summer; no soiling is practiced, though a very small feed of meal is sometimes given at milking time. Almost invariably green corn is fed in the fall as soon as it is well grown or as soon

as the pasture begins to fail; this fodder also constitutes one of the standard feeds for winter and is usually cured in the shock and fed in an open yard, though occasionally it is cut or shredded and fed in a manger. Clover and timothy constitute the principal hay, which, together with corn and oats, sometimes ground, but as often whole, and possibly a few pumpkins or turnips, make up the ration.

Probably dairying has worked a greater change in the people engaged in it than has any other kind of agriculture in the state. During the wheat period it was customary for the German to get up early, harness his team, eat a light breakfast, and at six, or six-thirty o'clock, go to the field, where in a slow but steady and painstaking way he would plod along at his work, stop about ten for lunch of brown bread with ham or sausage and a few cups of coffee, take an hour or a little more for his dinner, repeat the program in the afternoon, reaching the house a little before dusk even in the longest days, and after taking the harness from his horses, and eating supper, go to bed; the "chores" were invariably left to his *Frau*. This routine in a little less methodical manner was carried out by other foreigners and even by many Americans, though the latter always worked fewer hours and at a brisker pace. These various nationalities have all gone into dairying, and their habits of work have undergone a transformation. They still must arise early in the morning but the first duty is to get the milk started to the factory and in this the boys and girls have a part. Breakfast comes at a later hour and by the time the teams are started to the field the sun is high. The leisurely manner of the farmer of a generation ago will not do now, and with a fast-moving team, with little lingering at the ends of the field, with the lunches omitted, the Germans as well as the rest have adopted the genuine American hustle.

Dairying is here to stay. If it does not offer as many possibilities for sudden wealth as does tobacco, it is less of a lottery, and has fewer failures charged to its account. It will go on making the soil richer for an indefinite number of years. It is to the ameliorating effects of dairying that tobacco farming owes its success and permanence, and it is fast coming into favor as a supplement to that industry.⁸⁵ It is, however, the opinion of both

⁸⁵ *Wisconsin Tobacco Reporter*, December 15, 1893.

dairymen and real-estate dealers, that the price of land in some parts of the county has gone beyond the point where it will be a profitable investment for dairy purposes. To make any net gain at dairying on land at a hundred dollars an acre, with interest at five per cent., requires keener business ability than most farmers possess; and these conditions are likely to continue while there are such limitless possibilities for dairying to spread over northern Wisconsin and other similar districts.

TABLE SHOWING PRICE OF BUTTER.

1836.....	45 to 50c
1840 to 1850—Reported by old settlers to have been worth 3 to 5 cents in summer and 25 cents in winter.	
1851.....	10 to 12½c
1855.....	20 to 25c
1860.....	9 to 15c
1865.....	15 to 40c
1870.....	25 to 38c
1875.....	16 to 25c
1880.....	18 to 25c
1885.....	15 to 22c
1888.....	10 to 16c
1889.....	15 to 20c
1890.....	14 to 28c
1891.....	17 to 30c
1892.....	17 to 31c
1893.....	20 to 33c
1894.....	16 to 25c
1895.....	17 to 25c
1896.....	15 to 24c
1897.....	14 to 23c
1898.....	15 to 22c
1899.....	16 to 27c
1900.....	18 to 29c
1901.....	18 to 25c
1902.....	19 to 29c
1903.....	20 to 29c

Amounts produced:

	Butter.	Cheese.
1850.....	294,938*	.....
1857.....	509,150	28,660
1860.....	890,200	72,600
1865.....	645,000	28,605
1870.....	1,242,800	43,400
1880.....	1,630,000	262,000
1885.....	1,439,000	301,000
1890.....	2,206,000	1,063,000
1895.....	3,288,000	1,449,000
1899.....	4,440,000	2,066,000

* Butter and cheese.

CHAPTER V.

SIZE OF FARMS AND ESTATES.

In studying the size of estates⁸⁶ for an early period either for the state of Wisconsin or Dane county, it is necessary to notice several chapters of contemporaneous history. To begin with, the movement of settlers to this district began at a time when wild-cat banking was at its height, when paper money was as easily made as paper cities, and both were offered on long time, easy terms, and small payments. Several of these paper towns contended for the location of the capital of the new territory, which had been cut off from Michigan in 1836, and within a few weeks it was located at the Four Lakes. This was by no means an accident, for although hardly a man on the territorial council had seen the spot, or even knew where it was, there were at least two men who knew very definitely—these were the governor of Michigan and the man destined to be the first governor of Wisconsin. Their powers of persuasion exceeded that of any of the rival aspirants, each of whom had the best possible site for the city which was variously located from Des Moines, Iowa, to Green Bay, Wisconsin. Be that as it may, the location of the capital city at Madison had a direct influence on the adjacent country, and during the same year a large amount of land was purchased, proximity to the new city being the main desideratum. The size of the purchases ranged all the way from single forties taken by men who carried the chain in surveying

⁸⁶The term estate is used to mean the amount of land owned by one person. On the size of the estates, which is surely an exceedingly important item, involving as it does the subdivision or concentration as the case may be, in land ownership, the censuses are uniformly silent. In the report of the eleventh census (see "Agriculture by Irrigation," p. 1) this matter is disposed of by the naïve remark that "a person can have ~~not~~ one farm unless the estate is so large as to require a resident farmer upon each tract."

parties, to half a dozen sections gobbled up by eastern politicians, prominent among whom was Daniel Webster, who for a time owned the land on which Stoughton now stands. The average size of these purchases was somewhat above six hundred acres.

SIZE OF FARMS ACCORDING TO CENSUS REPORTS.

We will pass over a considerable number of years including the panic of 1837 and the period of slow recovery which followed, since they furnish nothing of importance to our subject. Sales practically ceased for a year or so; many of the large estates changed hands frequently and by 1850 few of them remained. During the early '50's the influx of Germans and Norwegians directly from Europe, having but little ready cash, resulted in a multitude of small purchases, and in 1854 the average purchase was ninety-two acres; this was raised very materially above what it otherwise would have been by several extensive purchases by speculating companies. There are no figures available, but a study of the old entry-book, the various plats for the '60's, together with the manuscript census returns for 1870 show that these settlers added to their original homesteads an occasional forty or eighty. This is well indicated in the census reports, it appearing that the farms below fifty acres decreased in number about sixteen per cent., while those above that increased nearly sixty per cent. Again, in 1860 the farms between twenty and fifty acres not only ranked first in numbers but comprised by far the largest aggregate acreage, while in 1870 those from fifty to one hundred acres exceeded the smaller class in the aggregate area and also outnumbered them.

The census returns for 1880 and 1890 throw very little additional light on the question under consideration; there is, however, a steady falling off of the number of farms below one hundred acres⁸⁷ and a corresponding gain of those above that figure from 1870 to 1890. So far as the small farms are concerned this showing is no doubt correct and not wholly without meaning,

⁸⁷See note at beginning of this chapter. It is impossible to discuss this subject without some comparison with the census returns, but it must not be forgotten that *estate* and *farm* are two distinct things, although they do not in the towns worked out minutely (see below), differ widely in number and are for the most part identical.

but not so much can be said of the larger ones. Here we have a group from one to five hundred acres inclusive, and in 1890 nearly three-fifths of the farms in Dane county fell within these limits, but it signifies next to nothing beyond the bare fact that farms had on the average increased in size. Within these wide limits are comprised the hundred-acre farms which are by no means few, the hundred-twenty-acre, the hundred-sixty, the two-hundred, and the two-hundred-forty acre farms all of which are commonly met with, not to mention the half-sections which appear in every township. All of these are dumped promiscuously together as though it were of but slight consequence what changes happened so long as the acreage remained above the hundred mark, yet the average for the year 1890 was one hundred twenty-four acres; thus the major part of all farms are, so far as classification is concerned, within this wholesale grouping. However, there are a few above and below these limits that reveal some general tendencies. For example, there were four farms above five hundred acres in 1860; in 1870 these had disappeared; in 1880 there were forty-three of the size mentioned, while in 1890 they had dropped to twenty-eight. Turning to the other end of the list we find the number of farms of twenty acres and less decreasing until 1880 and then increasing some twenty-five per cent. by 1890. These results are not beyond explanation. The small farms were not suitable to wheat culture and especially when that crop began to fail these little farmers got rid of their few acres as best they could and went farther west or gave up farming altogether. With the advent of the tobacco industry the small farm was given a new lease of life, and odd scraps, or even portions of large farms were brought up and turned into tobacco farms. It is not so easy to speak definitely regarding the unusually large tracts.

As stated, there were four farms of over five hundred acres in 1860. The number is small at most, and part of these consisted of poor, undesirable land which had hardly advanced beyond government price. The lack of any further tendency toward concentration in ownership is of more consequence than the mere disappearance of these four large pieces by 1870.

As explained in another connection the value of land failed to respond to the general rise in prices during the period of green-back inflation, and hence was not a favorite object of investment,

railroad bonds and the like taking precedence. The soldiers were inclined to do business on a larger scale than they had been contented with before, and this tendency was manifested in at least two lines; they either sold their small farms and went west or they bought out their neighbors and so increased their acres. These causes together with financial changes resulted in a rise in the price of land finally, and by 1880 the large farms of over five hundred acres had risen to forty-three, the greatest number since the early days of speculation. The average size of farms for the county at this date was one hundred twenty-eight acres. The falling off of large farms during the period since 1880 will easily come within the more detailed discussion of the different parts of the county.

SIZE OF ESTATES IN A FEW REPRESENTATIVE TOWNS.

The data on which the following comparisons are based are taken from the manuscript census reports of 1870, from the Dane County Atlas, by Foote & Company, of 1890, and the Atlas by L. W. Gay & Company, 1899. These are fortunate dates, the first being about on the dividing line between the wheat period and the time of diversified farming, and the atlases dropping in so closely to the census dates since that time.⁸⁸

Eight towns chosen with reference to physiographic and social conditions have been considered separately at these dates: Albion and Christiana in the southeastern, Vermont and Perry in the southwestern part of the county, the others variously located. The estates are divided into seven groups, which happens to be the same number used for farms in the census, the main difference being the more minute classification of the estates of over one hundred acres.

The towns of Albion and Christiana lie almost wholly within the rich Trenton limestone area which has proved to be the choicest tobacco district of the state. Vermont and Perry are in the "driftless" portion of the county, are rough and broken, and in consequence have gradually turned to dairying. Vienna and

⁸⁸The federal census reports do not give town returns, and the manuscripts are not to be had subsequently to 1870 because of the mortgage statistics and kindred matter which is thought to require secrecy. The state census reports contribute nothing of value on the subject.

Fitchburg are fairly representative of the mixed-farming district. York was taken because of its wholly disproportional share of the sheep of the county, while Dane is kept in the table as an example of negative results which are likely to obtain where the classification is on too broad a scale.

Table showing size of estates in representative towns for the years 1870, 1890, 1899.

WHERE LOCATED.	Year.	No. OF ESTATES.								Total No each year.	Average in acres.
		Under 10 acres.	10 to 20.	21 to 39.	40 to 79.	80 to 159.	160 to 320.	Over 320 acres.			
MIXED FARMING TOWNS.											
Dane	1870	0	1	0	34	85	45	1	166	135.4	
	1890			9	51	86	45	2	193	115.8	
	1899			7	43	78	38	3	169	138.8	
Fitchburg	1870	0	1	0	22	86	47	6	162	141.74	
	1890	2	2	6	43	82	48	4	187	122.8	
	1899	2	1	6	43	84	43	5	184	124.8	
Vienna	1870	0	3	1	23	65	61	4	160	143.9	
	1890	1	14	5	36	57	57	4	174	132.4	
	1899	1	7	5	38	71	53	3	178	129.1	
York	1870	0	0	0	26	77	58	4	165	138.6	
	1890	0	1	3	55	71	53	3	186	122.9	
	1899	0	2	2	49	77	52	2	184	124.3	
TOBACCO TOWNS.											
Albion	1870	2	6	2	31	86	34	2	163	137.7	
	1890	23	59	23	100	98	19	3	325	69.03	
	1899	20	61	29	97	109	15	1	332	67.9	
Christiana	1870	0	4	4	14	51	46	2	121	185.7	
	1890	5	55	29	70	92	27	0	278	81.9	
	1899	8	61	25	67	106	24	0	286	76.7	
DAIRY TOWNS.											
Perry	1870	0	2	1	17	71	55	4	150	154.5	
	1890	4	21	6	45	83	45	3	207	111.	
	1899	4	10	5	37	74	52	4	186	123.2	
Vermont	1870	0	0	0	23	92	40	1	156	149.6	
	1890	5	5	9	45	89	50	1	204	114.04	
	1899	2	2	5	31	86	48	5	179	129.5	

It will be seen that in 1870 the number of small estates, say below twenty acres, was about the same for the different towns, what difference there is, however, being in favor of the towns which still lead in this respect. This was on account of social rather than economic causes; the poorest of the foreigners sometimes dividing a forty into two or more pieces while the Ameri-

cans usually scorned such little patches. Running over the different groups for the year 1870, one can draw no particular inference respecting the different types of towns. It appears that the same kind of farming had resulted in farms of approximately the same size, and the variations that do occur seem to be the result of social forces, or mere chance. It is noticeable that in the tobacco towns the number of estates below forty acres increased from eighteen in 1870 to two hundred four in 1899; a very large increase; while in the case of estates of one hundred sixty to three hundred twenty acres the decrease is more than fifty per cent. and estates over three hundred twenty acres have all but disappeared. In dairy towns estates below forty acres show a decided falling off; the next larger group increases up to 1890 and then takes a considerable drop; in the remaining groups the increase in number is definite and almost uniform, though not very great. Thus the tendencies in the dairy district seem almost the exact counterpart of those in the tobacco district, the latter showing a movement toward small estates, the former toward those comparatively large. In the three towns characterized as mixed farming areas we find but few estates below forty acres and they seem to be disappearing since 1890. The medium-sized estates show a slight increase in number, while those which may be called large, that is above one hundred sixty acres, have declined in numbers in every instance. Dane remains, and here we have a paradox. The number of estates in each group, with the single exception of the one comprising those above three hundred twenty acres, decreased between 1890 and 1899.⁸⁹ When the plat of the town is seen this peculiar result is at once explained: there has been a general increase of size within each group, but it so happens that the larger share of the farms have their boundaries enlarged by the addition of a twenty or forty, and still stayed within the group, yet thirty-two estates disappeared altogether. The exception to the decrease seen in the largest sized estates is of no significance as the additional one is not extremely large.

It may be noticed further that in the town of Christiana the

⁸⁹The first of the two groups is here omitted on account of the difficulty of distinguishing estates from wood-lots belonging to someone a few miles distant, often in another town or even another county, but there are few small estates in the town and the result could not thus be seriously changed.

average size fell from eighty-two acres in 1890 to seventy-seven acres in 1899. During the same period the change in the town of Perry was from one hundred eleven acres to one hundred twenty-three acres; yet if these two be averaged there is little meaning to the result.

No better illustration of the point in question could be found than the census figures for Wisconsin which show the average size of farms to be one hundred fourteen acres for the years 1860, 1870, and 1880, yet all sorts of changes must have been in progress.

It may be of some slight consequence to know that the size of estates in those two towns is on the increase, just as it may be of some avail for a dealer in fruit to know that the average price per bushel of apples, pears, and grapes taken together has fallen ten per cent., but before he makes further sales or purchases it will be necessary to inquire into the market. Thus before anything can be predicated as to the changes in landed estates it would seem desirable to know what is taking place under the various systems of farming within definite physiographic areas, and during periods of time which have some business significance, rather than to take arbitrary divisions of both time and territory, and adding together the like and the unlike, strike general averages, into which, and out of which, the economist and the historian may read results illustrative of pre-conceived notions.

It may finally be said that there is positively no tendency in this county toward either large estates or large farms.

CHAPTER VI.

LAND VALUES.

In discussing the values of land at the various periods it is necessary to deal with data gathered from many scattered sources and differing widely in trustworthiness. Anyone who has given the question of real-estate values serious consideration is aware of the fact that the subject is a slippery one. Politicians, and even historians, talk glibly about the rise and fall, or the stability of farm values, without giving any basis for the generalizations, and if the present treatment does nothing more than to show unmistakably the character of the matter that must be wrestled with before dogmatic statements should be made, it is felt that some purpose has been served. Not that it is impossible to arrive at definite results; by no means; but that unusual care must be taken, and the figures must be criticised, corroborated, and subjected to conscientious analysis before conclusions worthy of the name can be reached. To begin with, it seems desirable to pass in review some of the more weighty obstacles which confront the man who has occasion to pass judgment on the value of a farm as compared to the difficulties in valuing personal property. It may be said that in the case of valuations for assessment of taxes it is the latter, not the former kind of property that causes the trouble. Very well; but the question of finding personal property and of putting a fair price on it when once it is brought to light are two very distinct propositions.

The kinds of personal property which are considered fit subjects for taxation are, almost without exception, such things as are daily bought and sold on the market. Perhaps an importer of fine woollens may hoodwink the custom house officer into listing it for a third of its actual value, but this is a fault to be charged to the clumsiness of the system as well as to intrinsic dif-

difficulties involved in judging cloth. The same can be said of merchandise in general; it also holds good in the case of bank stock or live stock—they are daily and hourly put upon the market in large or small quantities as circumstances may determine and what they bring may be taken as their real values. And will not the same hold true of real estate? It will, unquestionably, except—and the exception is the all-important thing to be understood—that land is not normally a kind of property to be bought and sold in the ordinary course of business transactions which the wants of man and the division of labor make necessary. For the most part the sale of land pre-supposes a change of business or a change of residence, which is entirely wanting in the usual buying and selling of chattels. This is entirely true of rural real estate however it may vary in the case of cities. Very few farms are the subject of speculation, though they are sometimes so considered when held for long periods by non-residents as permanent investments. Another difficulty comes in the matter of classification; cattle, grain, groceries, what not, can be put into grades and quoted at prices with reasonable accuracy, but in grading land only the roughest outlines can be set and even these must be elastic or they will be obliterated by over-lappings and exceptions.

Another difficulty, and this probably as serious as any, is in the records of sales. The carefulness and accuracy with which records of transfers of land are made may seem at a glance to make it possible to investigate this phase of prices more easily than in the case of personal property, but when the purpose of the record is considered the balance is found on the other side. When even so loose an authority as a newspaper quotes wheat at fifty cents, and calico at ten cents, at a date now out of memory, it may safely be assumed that these prices are approximately correct. In the first place there are probably no reasons for deliberate misstatements; more than likely the accuracy may be tested by comparison with other quotations. And, moreover, the sole purpose of publishing the price-list was to let it be known that goods could be bought and sold for the sums named. On the other hand, a piece of land is sold, and the deed, containing a statement of the consideration, is recorded by a county officer and the record carefully preserved. But the ultimate reason, in fact all save the only reason, is to furnish proof that the farm was sold by one person to

another, each of whom was competent to be a party to such a transaction, and each properly identified as the person whose name appears in the instrument of conveyance. As to the price named it is a mere form to satisfy one of the fundamental requisites of a contract, that is, that there must be a consideration.

We find, then, that the consideration named in the deed may bear almost any possible relation to the price actually paid. In the concrete instance of Dane county it will be seen by a mere glance at the early record books, that there is no possibility of tracing any considerable proportion of sales for those years. The complications resulting from partnerships when small undivided fractions of widely scattered pieces of land were sold, or worse yet, traded for merchandise in Baltimore or bank stock in New York, render the whole mass unintelligible. So dropping these we turn to smaller individual sales and the confusion, though very much less, is still sufficient to preclude any possibility of satisfactory results. A man sells a piece of land, classed by the assessor or census-taker as improved land; the improvements may vary from a mere trifle to the major part of the value. Nor is this all; there may have been some personal property transferred, either one way or the other, and pride, carelessness, or dishonesty may have prevented any mention of it in the deed. In going over some hundreds of records in the office of the register of deeds it was found that out of every hundred there were a few obviously unreliable, not to mention such transactions as involved chattels. For example, a farm is sold three times within a year, and although land is known to be advancing in price, the sum named in the deed remains the same. This is not a clear case of failing to name the sum actually paid but in all probability it is such. Another class of transfers which must be dealt with cautiously are those where land is transferred from one to another member of the same family, yet after the family is gone from the vicinity it is unsafe to label every transfer of Smith to Smith as one of this class, and again, even the suspicion of such a case may be hidden by the different surnames of persons who, after all, belong to one family. A mother deeds two pieces of land to two married daughters, the price named is a nominal one taken at a hazard, or merely to strike a rough balance of accounts and yet these figures will slip into a list made up by a serious investigator for scientific purposes.

Shall we then conclude that it is a hopeless task to arrive at credible results in the rise and fall of land values? Not at all. It does, however, appear plain that no one method is without faults, and therefore that all possible checks and comparisons are needed, but more than all these, the worth of the results depends almost entirely on the knowledge, patience, and skill of the one on whose judgment the elimination, balancing, and computation depend.

It seems reasonable that the history of the transfers of a given piece of land, about which the exact conditions of each transfer may be known, is much more valuable than an aggregate of sales where little or nothing is known in detail; and also that the recollections of men who helped to make the history of the times, and whose business it was, in part at least, to know the selling value of land, is testimony worthy of careful consideration. It is in this composite way that the material for the following discussion was obtained. The elements entering into land values will be touched upon at the close of the chapter.

To begin with we will notice the significance of the aggregate sales and average prices for a series of years as reported by the register of deeds.⁹⁰

Land sales of Dane county.

Year Ending Sept. 1.	No of sales.	Acres sold.	Price per acre.
1845.....	113	10,921	\$2 84
1855.....	745	68,894	6 68
1865.....	338	24,613	17 08
1875.....	46	3,635	21 80
1880.....	—	23,872	20 91
1883.....	—	32,929	32 24
1885.....	258	32,238	31 40
1887.....	—	9,299	29 00
1890.....	—	18,491	31 00
1895.....	198	17,677	43 50
1896.....	206	18,338	46 65
1898.....	181	12,538	45 60
1899.....	290	21,232	44 30

⁹⁰For the years before 1885 the figures were made out directly from the record books at the office of register of deeds.

Before 1845 little land sold under warranty deed, and the land that did change hands was for the most part in the nature of transfers of preëmption rights or a sale of the improvements where the land itself was reckoned at government price and the purchaser of the improvements took his chances of getting it whenever it should be put upon the market. By 1845 many mortgages fell due and in very few instances was the mortgagor ready to meet his obligation and this must have been the cause of many transfers. There was so much fairly good government land still to be had it is unreasonable to suppose that the land, aside from the improvements, could be worth much above the original dollar and a quarter an acre. This supposition is well borne out in the price for which land sold, for on an average there was a margin of but one dollar fifty-nine cents to include both the value of the improvements and the rise, making it probable that the rise was practically nil. Ten years later the matter had a decidedly changed aspect. The reasons are apparent: government land had ceased to be a factor in land values, since little of a desirable quality remained; the excitement over wheat during the boom of 1854 resulted in a marked rise in land, and although the boom was exceedingly brief, a considerable part of its force was expended between September 1, 1854, and the following spring, that is, within the year for which the figures are taken. Thus in all likelihood the average price is not only higher than for any previous year, but the rise during the year ending September 1, 1855, was proportionally greater than for any previous year. The inability to meet payments was still a great factor in land sales; in fact, it was during the '50's that the influence worked out its greatest results, and, as is often remarked by the old settlers, a comparatively small proportion of the pioneers kept the land first entered. They sold out when compelled to do so, and moved to a location a little less desirable, or to one where a farm could be had on time, and began again.

In 1865 the results are interesting. The number of sales was less than half that of 1855, while the price seems to have advanced in about the same ratio as in the preceding decade. But it must be remembered that this seventeen dollars an acre was reckoned in greenbacks, which were worth about seventy cents on the dollar. Thus it is entirely fair to say that land had not risen over about two dollars per acre, and this would certainly

not exceed the value of the improvements made since 1855; or in other words, land had failed to make any rise whatever. The explanation is simple: land had failed to respond to the general rise of prices because the farmers had gone to war, leaving an inadequate force to carry on the ordinary farm operations; the general unrest of the times led many to seek new homes in the farther West, thus putting their Wisconsin farms on the market at a time when buyers were few. Wheat was not yielding returns for the immediate expenses of raising; it could not compete with the new lands of the West, and other crops were not sufficiently well established to create a demand for land on which to grow them; as a result, much old wheat land was not wanted at any price.

This might seem to mark the year as an abnormal one, but when it is remembered that the same conditions had existed for three or four years before, and continued till near the close of the '60's, it appears to be a fair example for our purpose. It is the year 1875 that is farthest removed from the normal, for here we find the sales to be less than one-seventh as many as ten years before. Again the reasons for the situation are not obscure. The price of land had made a considerable advance as business recovered its stability in the early '70's. With the collapse of 1873 sales became few, but did not reach the lowest ebb till two years later, by which time the discouraged farmer was reluctant to put any more money into land, and yet he was equally reluctant to sell at a sacrifice. This is reflected in the figures of the table; the few farms sold, brought a fair price.⁹¹ Emigration to the West had continued, but this was partly offset by the new system of farming, and the inventions in agricultural machinery, both of which enabled a farmer to manage more land with a given amount of labor. It was, then, conservatism rather than any active agency that kept land from sinking below the prices reached in better times,⁹² and the new elements in farm economy were still too rudimentary to force the price up.

It would seem, then, that the results of the table are fairly reliable in the sense of showing the general trend of farm values.

⁹¹Currency was now worth about \$.87 1/4.

⁹²In 1890 there were twenty-three thousand, eight hundred seventy-two acres sold at \$20.91, but this was on a gold basis and, therefore, does not represent a decline.

In the first place, the number of sales is large and therefore the percentage of error coming from the unusual instances should be small. Another matter of consequence is the comparative insignificance of the improvements throughout this period. True, some of them were good, but on an average, they were far from it, and thus the upper and the lower limits of prices were not very far apart. Land could be classified as arable and not arable, and within each of these two classes the variation was not great. Since about 1875 these classes have almost disappeared, as dairy farming has made both swamp and hilly land more valuable than ever before, and the more desirable lands are carefully differentiated according to the crops which they produce to the best advantage. Houses and barns, fences and windmills, and improvements of every description have added to the value of many farms from twenty-five to a full hundred per cent. The chance element is thus much greater for the later years, yet the results do not appear meaningless.

By 1883 business was again brisk and land was once more in the ascendency, 32,929 acres being sold at an average price per acre of \$32.24. The year 1885 shows a little drop from this in both acres and price, but the change is not sufficient to warrant any generalizations. Perhaps it was due to the fall in the price of farm produce, but just as likely the discrepancy would be explained by a minute classification and comparison of the land sold. It was at this time that tobacco land first began to command a premium; also the hilly land in the southwest part of the county rose in price as never before. A year is a short period in the history of land and it often happens that for a given year there will not be over two or three sales in one town, while a dozen are made in a town adjoining, with no visible reason, and the next year may see the matter reversed. The sales of 1887 seem to show a decided drop in price, 9,299 acres selling at twenty-nine dollars. In the first place, the sales are small and it is possible that a third of this was swamp land, which always goes at a low figure; but without guessing, the apparent decline can be shown to be nothing formidable. The report of the register of deeds gives the sales by towns and we find that more than one-fourth of the land sold, 2,521 acres was in five of the poorest towns of the county, and

this land averaged less than seventeen dollars per acre, while in five of the towns where land was high, only 1,046 acres changed hands, but the price was more than forty-five dollars per acre. The average taken within a single town means little enough, but when the average involves towns lying in districts so unlike as the tobacco section and the dairy section of Dane county, the vagueness of the result is obvious. In reality the prices of land in both these sections advanced between the years 1885 and 1887, and it was the mere incident of many sales in the one and few in the other that gave the appearance of decline. In 1890 the sales were well distributed among the towns, and the price was approximately as in 1885. Between 1880 and 1885 there was much excitement over tobacco growing, and choice land for that purpose sold for one hundred dollars an acre. During the last half of the '80's the tobacco business experienced a relapse, and this accounts for the small number of sales in that district, while at the same time the interest in dairying continued, and in consequence there was a marked movement in lands suitable for that purpose. A general average conceals these facts and appears to show a decline in all land values.

Coming to the latter part of the '90's, we have some excellent data on the subject of values. The Wisconsin State Tax Commission has calculated the value of all property of the state, and its method of computing farm values is no doubt as reliable as any yet in use. They took the whole number of sales as reported by the register of deeds for the years 1895 to 1899, inclusive, and after eliminating such as were obviously not bona fide sales, the acres sold in each town were taken year by year and the rate per cent. of assessment to selling price computed. This was done for each town for each of the five years. Then an average rate was struck for the period and with this ratio of assessment to selling price, or true value, and the total assessed value, the true value of all land of the town was found, the process being merely a case in simple proportion. With this elaborate process it turns out that the average value of land for the entire county during the five-year period is forty-seven dollars per acre. This, it will be noticed, is a trifle higher than it would appear from the prices based simply on the assumption that actual sales may be taken as representative, but the difference between the two results is not

serious. No doubt the percentage of assessment to selling price gives the better basis for estimating values, yet for the purpose of showing the general movement of prices the average of sales seems fairly satisfactory; at least the same percentage of error which appears in the results by this method for the period 1895 to 1899 would not be sufficient to change the general trend, and for reasons already given it is believed that the error would be much less over a good part of the early period. Again it may be said that land has never yet declined in price in this county. The average for 1896 is higher than in succeeding years, but as shown for a previous year, this deceptive average comes from an uneven distribution of sales. In the few dairy towns where land is cheap, eight hundred acres were sold at about twenty-two dollars per acre, while in four towns in the opposite corner of the county more than three times as many acres changed hands at fifty-five dollars per acre. In the years following, when the price seems lower, the sales in the dairy section were two or three times as great, and in the other section much less than for the year 1896.

It is of interest to notice that the valuations of real estate for the four distinctive tobacco towns fall below that of four other towns where almost no tobacco is raised. This, however, may not be considered a fair comparison, as the town of Madison, where proximity to the city gives an added value, was included in the latter group; but taking four towns in the northeastern part of the county, where there is not even a village of any consequence, the price of real estate falls but little more than two per cent. below that of the tobacco-growing section. Surely this is conclusive evidence that tobacco growing is not responsible for any considerable part of the advance in farm values; yet, as before admitted, the very choicest of tobacco land sells higher than any other.

In looking over the records for some forty or fifty pieces of land, with data as to improvements and quality of land, it is remarkable that the results coincide closely with those reached by the statistical treatment used above. The prices in the individual cases are much higher, but that is because no swamp or hilly land was considered. Swamp land is still sold as low as five or ten dollars per acre, and some of the roughest land is hardly salable

at all. The choicest land is worth nearly one hundred dollars an acre where improvements are an inconsiderable part of the value, and a great deal of land with good improvements, say three thousand dollars worth on two hundred acres, sells for eighty dollars, leaving the bare land at sixty-five.

With land at this high figure can it go still higher, or must it cease to rise? In the first place, the causes of the present high price are of interest. No one pretends that the average farmer can make actual returns on the investment in the highest-priced land; far from it. It takes the best of them to make more than the current rate of interest. Yet land not only shows no tendency to drop in price, but persists in climbing steadily upward. In the first place, the entire agricultural community has implicit confidence in the stability of farm values; on the other hand, they expect a decline in the rate of interest, and they often express the belief that an investment in land, where the returns are three or four per cent. a year, is sure to be better in a term of years than twice that rate from other investments, because of the rise in the value of the land itself, and because of the comparative safety of land as an investment. There have been not a few instances of men who have felt that land at eighty dollars an acre was not yielding proper returns and so disposed of it, but on getting hold of the money found no better place to put it, and again bought land at a price as high as that received. Land, above all other kinds of property, is the best place for the man unfamiliar with business to invest his money. The owner of land has a home; living in the country is much less expensive than in the city or even in a village; and besides, many people prefer to live in the country. The constant increase of the conveniences of farm life must also be a factor in keeping the price of land at a high level. Just as improved street-car accommodations raise the price of suburban property, so the telephone, now to be had almost as cheap in the country as in town, the free delivery of rural mails, the improvement of country roads, the lessening cost of comfortable and attractive carriages, must result indirectly in adding value to the farms. The cheapening and improvement of farm machinery gives a chance for added net returns, and perhaps more than any or all of these influences the constant falling in interest charges makes land a favorite investment. What effect the latent pos-

sibilities of the West have in store for us will not be known until irrigation is reduced to a more scientific basis and extended to fields as yet untried. This might conceivably have somewhat the effect on the Mississippi Valley that the latter had on the farming of the eastern and middle states, but at present the limit of the upward trend of land values is not in sight.

CHAPTER VII.

DENSITY OF POPULATION.

The table below, showing density of population, has been carefully made out with the intention of giving changes in population actually on farms. This has not been altogether possible, but where villages are included the fact is mentioned.

The first thing of interest is the large population of 1860, and the comparatively uniform distribution over the county, indicating that about all the available land was occupied. From 1860 to 1870 ten different towns show a decrease; that was, at least in part, owing to the large numbers who entered the army and failed to return, or who returned, but with others had gone to the new lands of the West before 1870.

At least twenty-three towns show a decline in the decade following, this being the time of the greatest exodus of discouraged wheat growers in search of greener fields. At the same time there was a marked increase in some half-dozen towns, and with unimportant exceptions the increase was in Albion, Dunkirk, Christiana, and Pleasant Springs, that is to say, in the towns that were fast coming to the front in the new business of tobacco growing.⁹⁸ Farms were divided, either by sale or rent, and more help was needed to raise tobacco than had been required in general farming.

From 1880 to 1890 there was a decrease in some fourteen towns and an increase in about an equal number. Here we find the same influences at work. The increase is in the tobacco district, following the spread of the crop to new towns, noticeably Burke and Cottage Grove. The increase in tobacco culture and the in-

⁹⁸ Dane and Cottage Grove show increases, but this was owing, for the most part, to villages which had recently taken a start.

crease in density of population, fail, about this time, to coincide as closely as during the earlier period because the application of machinery to tobacco raising made it possible to dispense with a part of the labor, and also because the tendency to subdivide farms has been less pronounced since about 1885.

In the last decade twenty-two towns show a gain, and eight a decline, the rest being the same as before or doubtful. Here the trend seems to vary from former periods in some particulars: the tobacco sections show an advance of four per cent.; while the advance of the whole county is eight per cent. Evidently those who desire small farms for tobacco growing are finding them outside of the distinctive tobacco district; this might be hard to establish, but it is certain that tobacco culture has spread to nearly every town of the county, and that within the last ten years. In the general farming towns the better culture practised in all respects has resulted in the employment of more farm laborers, and the tendency toward smaller farms⁹⁴ means an increase in density of population.

It remains to speak of population in the dairy section. In the towns of Perry, Montrose, Springdale, and Vermont, there has been an almost uniform decline for the three decades since dairying became important. Vermont, which has become more exclusively a dairy town than any other in the county, shows a decline in population of almost thirty-four per cent. during the thirty years. The remaining towns which show declines for the whole period are those where dairying is fast gaining on other kinds of farming, as in Middleton and Oregon.⁹⁵ Still, two more, Roxbury and Berry, show a marked decline in population and these towns are not easily classified; they are settled very largely by Germans; are, for the most part, hilly and broken, and as wheat growing, which persisted longer with them than in other parts of the county, had finally to be given up, the hills were turned almost entirely into pastures. The conditions and the results are thus practically the same as in the dairy district, and no doubt these towns will before long be classed as dairy towns.

A smaller number of people are required to farm a given num-

⁹⁴See chapter on Size of Farms and Estates.

⁹⁵The villages of Middleton and Pheasant Branch were larger in 1870 than in 1890, but the exact numbers cannot be found.

ber of acres by dairying than by any other system of farming in this section, and the decline in population in the dairy district means that an economic adjustment is taking place and tells nothing as to prosperity or dissatisfaction of farmers in general.

Considering the county as a whole, the substantial gain in rural population during the past ten years would hardly seem to mark it out as a good subject for dissertations on "rural depopulation."

*Density of population per square mile, 1850 to 1900.**

Towns.	1850.	1860.	1870.	1880.	1890.	1900.
Albion	23.7	32.1	31.8	37.6	42.2	44.2
Berry		18.7	32.2	29.6	27.9	25.9
Blooming Grove.....	9.7	23.4	33.7	30.9	33.3	37.3
Blue Mounds.....		22.3	32.4	28.0	40.2†	29.1
Bristol.....		34.9	35.4	31.4	31.1	35.2
Burke.....		28.5	31.3	27.9	30.4	34.2
Christiana.....	29.3	39.8	37.4	51.5	66.0	66.6
Cottage Grove.....	21.8	33.3	26.5	32.3	36.3	36.3
Cross Plains.....		31.3	28.0	37.0	30.1	33.5
Dane.....		26.5	29.0	32.4‡	32.4	25.9
Deerfield.....	17.7	26.4	29.1	27.0	34.3	30.6
Dunkirk	23.7	48.9	33.2	35.6	39.1	42.6
Dunn	10.6	34.0	37.8	33.5	32.6	34.1
Fitchburg	16.6	32.7	32.1	32.5	26.6	27.9
Mazomanie					14.9	16.4
Medina		29.7	42.5	39.1	38.7	41.2
Middleton		40.1	50.8	42.0	39.9	43.1
Montrose		28.4	32.2	30.8	25.9	27.7
Oregon.....	17.7	34.9	41.6‡	27.5	23.3	24.4
Perry		23.3	29.2	25.6	27.7	29.2
Pleasant Springs.....	21.6	33.4	30.4	37.6	44.2	42.7
Primrose		24.7	28.2	24.4	24.4	22.7
Roxbury		34.2	33.5	32.1	29.8	26.8
Rutland	21.1	32.8	31.6	31.6	31.5	36.0
Springdale		26.2	31.6	30.6	31.2	29.2
Springfield		33.6	40.0	34.5	30.9	30.8
Sun Prairie.....		32.2	44.8‡	25.3	25.6	28.8
Vermont		25.7	34.6	26.8	24.8	22.9
Verona.....		32.0	31.3	28.3	34.0	36.1
Vienna.....		20.8	32.6	29.2	27.8	29.1
Westport		31.8	46.0§	28.6	31.5	44.6
Windsor		28.4	34.9	33.6	36.9	50.1
York		28.6	29.6	27.3	26.7	26.2

* This table is partly taken from a thesis on the "The Social and Economic Development of Dane County," by F. E. Harrigan, University of Wisconsin, 1901. The other parts were worked out from the Census Reports.

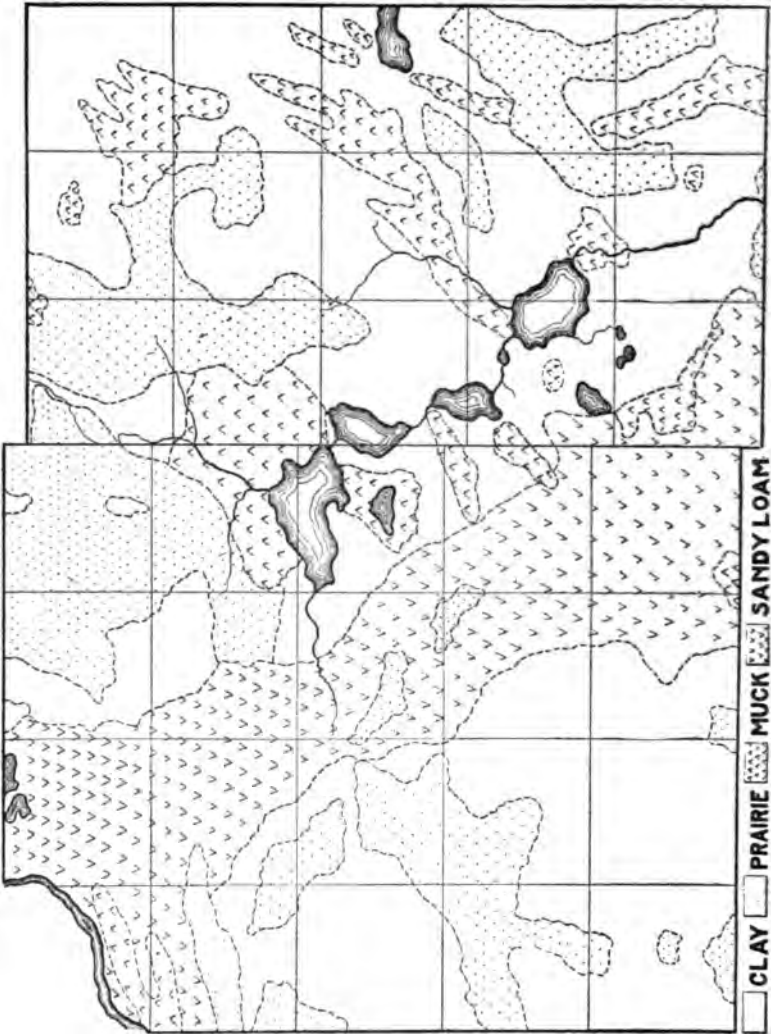
† For this and preceding years a village was included. Black Earth and Madison are omitted because it is impossible to separate the village and city populations from the rural.

‡ For this and preceding years a village was included.

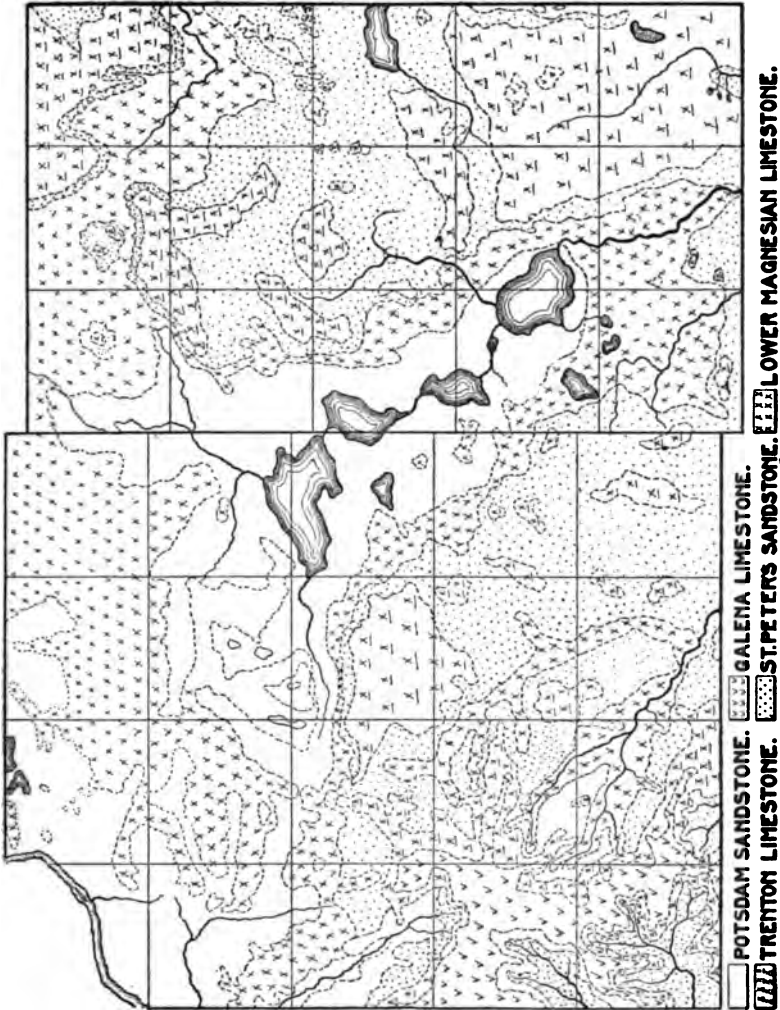
§ Probably this included inmates of the insane asylum.

APPENDIX.

I.—GENERAL GEOLOGICAL MAP.



II.—SOIL AND VEGETATION MAP.¹



¹This map answers roughly for a vegetation map. Oak predominates on the clay, and sandy loam ; prairie grass on the prairie soil ; marsh "grasses" on the muck.

III.—GLACIAL MAP.

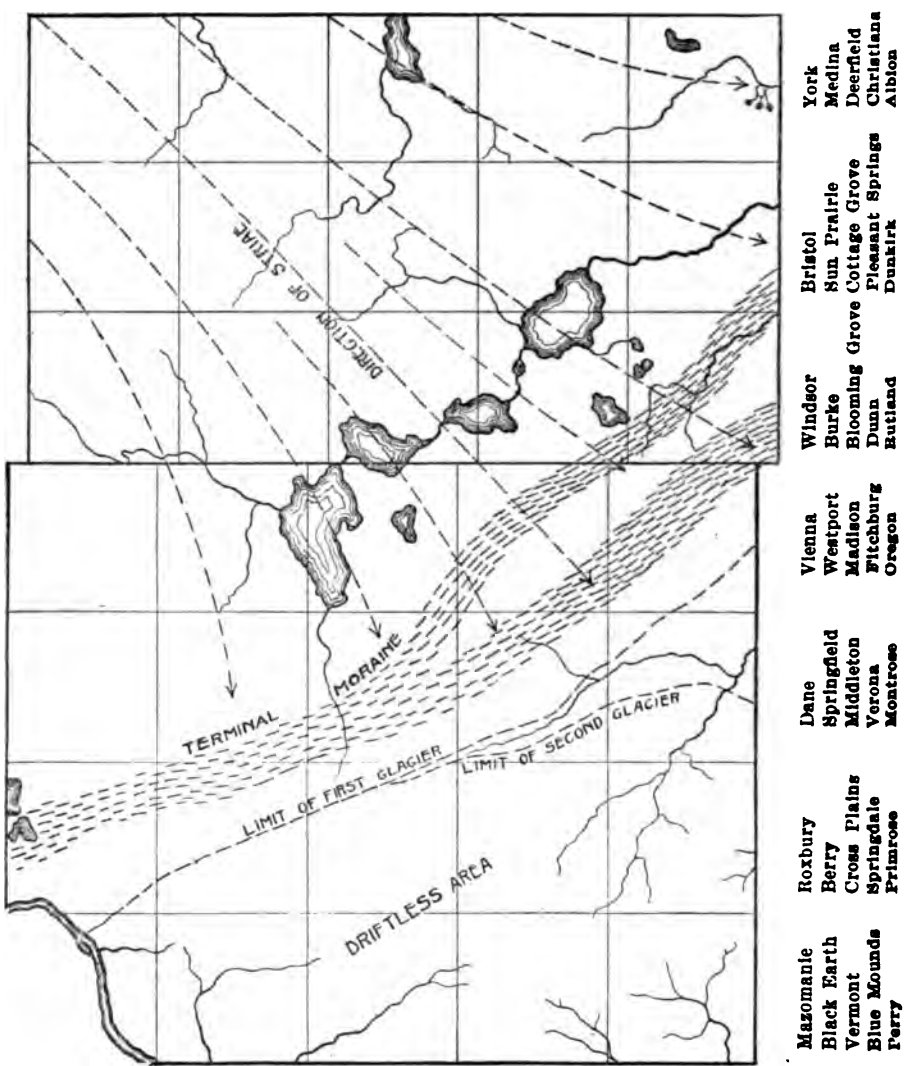


TABLE I—*Principal farm crops.*

	CORN.		BARLEY.		RYE.		OATS.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
1840.....		3,080						10,250 (and rye)
1850.....		122,290		19,080				243,700
1857....	16,247	525,800	1,362 (1861)	23,931 (1861)	97	1,570	17,801	637,000
1860.....		570,500	2,623	84,520		4,043		900,800
1865.....	23,164	390,174	21,208		1,050	9,181	32,336	760,446
1870.....		938,000		148,700		15,600		1,491,000
1875.....	71,592		13,507		2,997		63,431	
1880.....	89,940	2,279,000	22,775	402,400	4,748	69,000	72,150	1,919,900
1885.....	81,716	2,770,000	34,197	964,000	3,011	78,000	75,541	2,246,000
1890.....	85,000	2,164,000	31,000	784,000	4,900	64,000	91,000	3,085,000
1895.....	87,300	2,095,000	12,700	206,000	3,968	44,500	116,000	2,292,000
1900.....	109,800	4,048,000	11,800	431,800	3,762	46,165	118,900	3,291,000

TABLE II—*Principal farm stock.*

	No. of horses.	No. of cattle.	No. of cows.	No. of hogs.	No. of sheep.
1840.....	101	510		628	5
1850.....	2,056	14,493		13,585	8,122
1857.....	7,196	30,773		14,351	24,932
1860.....	8,959	26,000	14,319	19,290	17,700
1865.....	11,254	26,639		20,569	65,000
1870.....	19,416	36,900	17,890	28,000	65,599
1875.....	18,280	43,400		29,179	64,314
1880.....	19,900	54,459	21,685	57,900	79,400
1885.....	20,000	61,000	24,646	64,000	51,000
1890.....	25,480	83,890	33,590	97,200	37,062
1895.....	22,800	64,700	37,584 (1901)	31,000	36,500
1900.....	19,000	69,000	41,323	41,400	32,156

TABLE III—*Miscellaneous.*

	BUCK-WHEAT.		FLAX.		GRASS. (cult'd)	CLOVER SEED.		TIMOTHY SEED.		AP- PLES.	POTATOES.		Tim- ber.
	Acres	Bush	Acres	Bush	Acres.	Acres	Bush	Acres	Bush	Acres	Acres	Bush	
1850....		1,464	..	27	.....		352 (c. t.)	.....		.....		106,380	.....
1857....	593	6,531	.....		28,879		581	.....	551	1,102 (bu.)	1,812	145,600	.....
1860....		1,249	6	119	.....		18	.....	358	.....		128,500	.....
1865....	1,159	14,597	404	1,157	.....		382	.....	295	1,563 (bu.)	2,261	167,600	.....
1870....		10,470	.....		.....			.....		.....		342,200	.....
1875....			.....		.....			.....		.....			.....
1880....			158	2,315	51,389	7,702	14,775	616	2,082	3,883	3,681	210,000	119,000
1885....			11	23	82,812	986	.....	446	1,792	3,392	3,383	311,000	110,000
1890....	663	7,000	5	83	88,600	5,869	10,000	349	1,482	2,767	4,088	352,000	112,800
1895....	275	1,844	64	82,000	561	468	2,298	2,139	6,326	256,000	80,000
1900....			64	243	98,000	909	1,464	176	666	2,200	6,123	330,000	84,950

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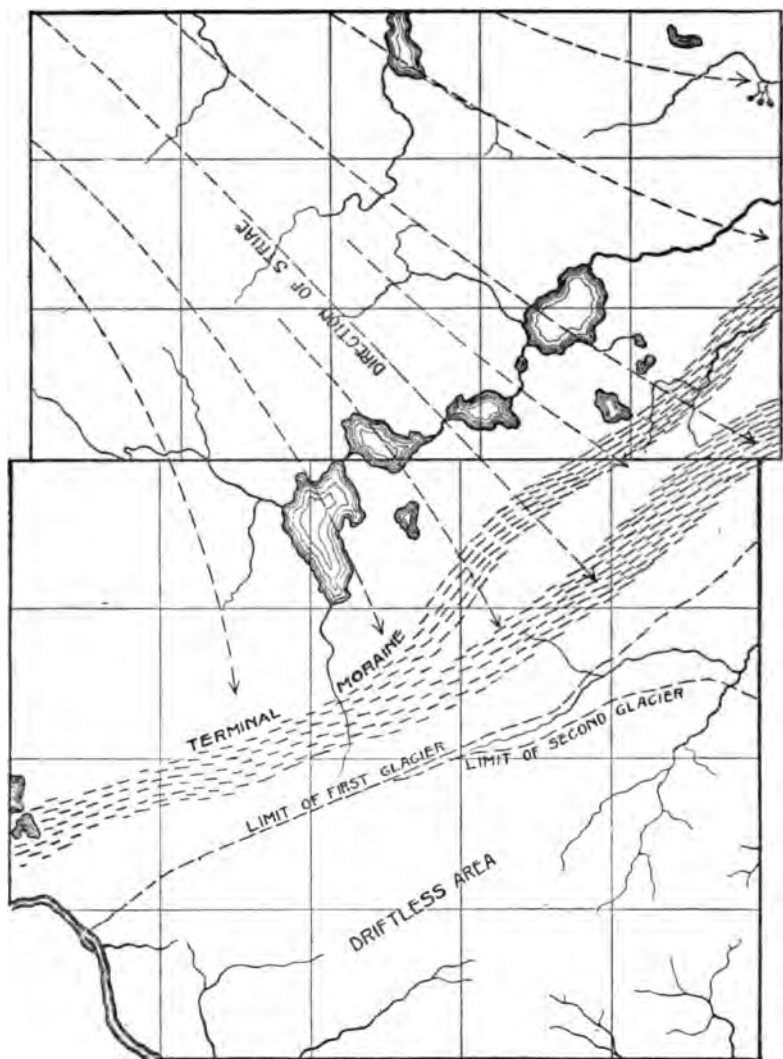
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Wisconsin Local History Collections.
Wisconsin State Journal.
Wisconsin Tobacco Reporter.

III.—GLACIAL MAP.



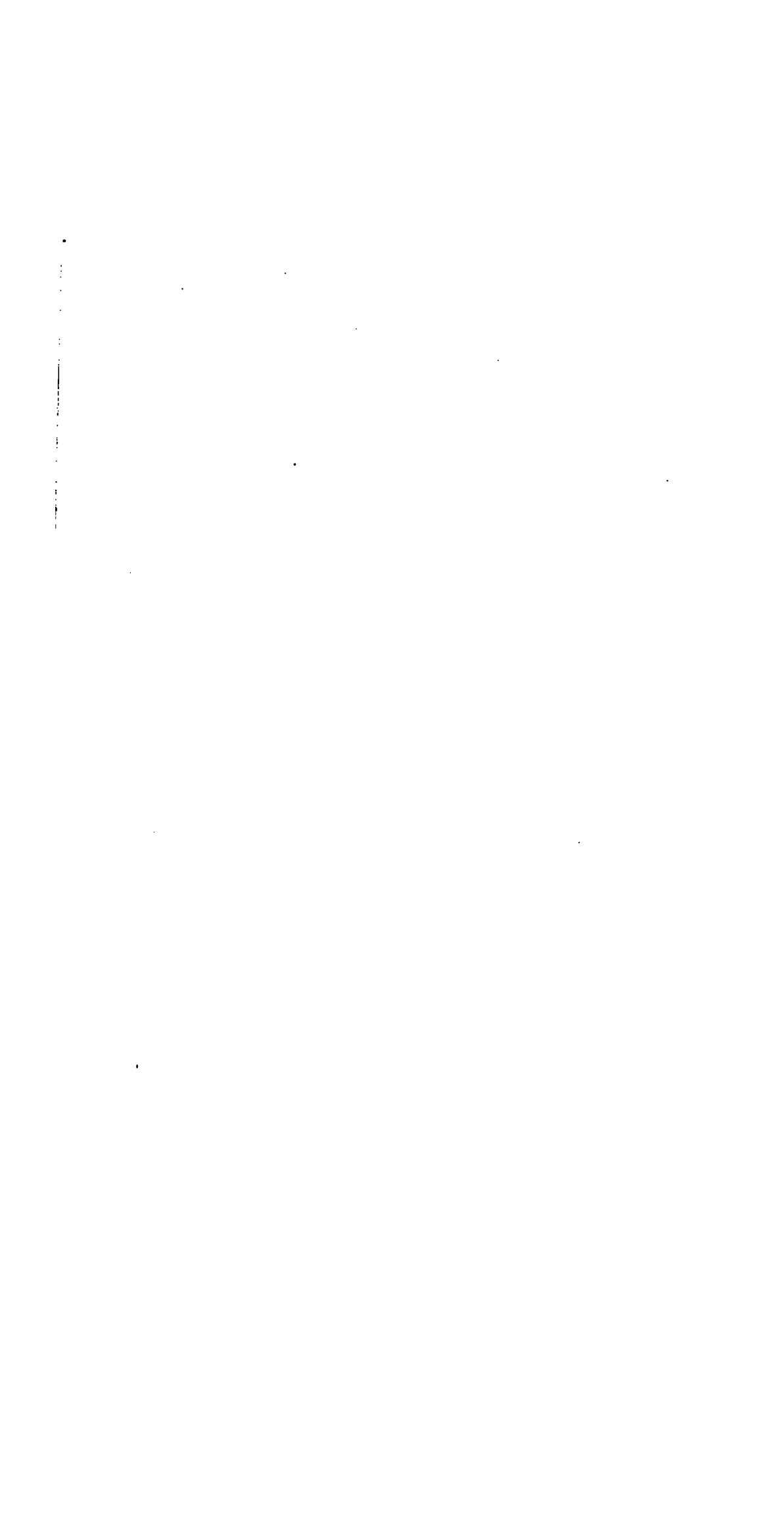
Mazomanie	Roxbury	Dane	Vienna	Windsor	Bristol	York
Black Earth	Berry	Springfield	Westport	Burke	Sun Prairie	Medina
Vermont	Cross Plains	Middleton	Madison	Bloomington	Cottage Grove	Deerfield
Blue Mounds	Springdale	Verona	Fitchburg	Dunn	Pleasant Springs	Christiana
Parry	Primrose	Montrose	Oregon	Rutland	Dunkirk	Albion

TABLE I—*Principal farm crops.*

	CORN.		BARLEY.		RYE.		OATS.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
1840.....		3,080						10,280 (and rye) 243,700
1850.....		122,290		19,080				
1857...	16,347	525,800	1,362 (1861)	23,981 (1861)	97	1,570	17,801	687,000
1860.....		570,500	2,523	84,520		4,043		900,800
1865.....	23,164	390,174	21,208		1,050	9,181	32,336	760,446
1870.....		938,000		148,700		15,800		1,491,000
1875.....	71,592		13,507		2,997		63,431	
1880.....	89,940	2,279,000	22,775	402,400	4,748	69,000	72,150	1,919,900
1885.....	81,716	2,770,000	34,197	964,000	3,011	78,000	75,541	2,246,000
1890.....	85,000	2,164,000	31,000	784,000	4,900	64,000	91,000	3,085,000
1895.....	87,300	2,095,000	12,700	206,000	3,968	44,500	116,000	2,292,000
1900.....	109,800	4,048,000	11,800	431,800	3,762	46,165	118,900	3,291,000

TABLE II—*Principal farm stock.*

	No. of horses.	No. of cattle.	No. of cows.	No. of hogs.	No. of sheep.
1840.....	101	510		628	5
1850.....	2,056	14,493		13,585	8,122
1857.....	7,196	30,773		14,351	24,932
1860.....	8,959	26,000	14,319	19,290	17,700
1865.....	11,254	26,639		20,569	65,000
1870.....	19,416	36,900	17,890	28,000	65,599
1875.....	18,260	45,400		29,179	64,314
1880.....	19,900	54,459	21,665	57,900	79,400
1885.....	20,000	61,000	24,646	64,000	51,000
1890.....	25,480	83,890	33,590	97,200	37,062
1895.....	22,000	64,700	37,584 (1901)	31,000	36,500
1900.....	19,000	69,000	41,323	41,400	32,156



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NO 142

ECONOMICS AND POLITICAL SCIENCE SERIES, VOL. 1, NO. 3, PP. 215-250

A HISTORY OF THE NORTHERN SECURITIES CASE

BY

BALTHASAR HENRY MEYER, Ph. D.

*Professor of Political Economy in the University of Wisconsin and Member of the
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PREFACE.

The first six chapters of this monograph, embracing about three-fourths of the whole, were ready for the printers in January, 1904, waiting for the decision of the Supreme Court. This decision was rendered on March 14, 1904, but since the first decision did not end the case, the essay was withheld from publication at that time. A summary of it was published in *The Railway Age* for March 18, 1904, Vol. xxxvii, No. 12, pages 409-412. For various reasons, it does not seem feasible at this time to change those expressions of the first six chapters which clearly indicate that they were written in anticipation of the first Supreme Court decision. The reader is requested to bear this in mind in reading those chapters.

The aim of this history of the Northern Securities Case is to present, in connected form, the leading facts and principles which may have an interest to students of economics, in so far as these principles and facts are contained in the record, briefs, and arguments of the Case. These embrace nearly 8000 pages in all. No attempt was made, excepting a few instances, to go outside of or beyond the statements made under oath by the various witnesses and the interpretations placed upon such statements by attorneys and judges. Several minor litigations connected with the Northern Securities Company have been practically ignored, for the reason that the chief records of such cases were embodied in the documents connected with the larger contest which these pages attempt to describe. A number of the briefer and more noteworthy documents are printed in the appendix to this essay.

B. H. MEYER.

Madison, Wis., January, 1906.

PRINCIPAL REFERENCES.

For convenience and brevity, the majority of the foot-notes and other references in the body of this monograph are generally given by number, each number corresponding to the same number in the following list of documents:

1. C. C. of U. S. Dist. of Minn. State of Minn. vs. North. Sec. Co. et al. Brief for the Defendants. (George B. Young, M. D. Grover, C. W. Bunn.)
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10. C. C. of U. S. State of Minn. vs. North. Sec. Co. et al. Brief of Complainant. (W. B. Douglas, Atty. Gen. of Minn., M. D. Munn, G. B. Wilson.)

11. C. C. of U. S. U. S. of A. vs. North. Sec. Co. et al. Brief for Defendants. (George B. Young.)
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14. C. C. of U. S. Spec. Exam. Trans., Vol. III. Defendants' Testimony.
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16. C. C. of U. S. Spec. Exam. Trans., Vol. I, Complainants' Record.
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22. S. C. of U. S. Complainants' Brief, etc. (Stratton and Douglas.)
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24. Interstate Commerce Commission. Order and Testimony.
25. C. C. of U. S. U. S. of A. vs. North. Sec. Co., etc. Oral Argument of D. T. Watson for the Government, at St. Louis, March 20-21, 1903.
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27. S. C. of U. S. Oct. Term, 1903, No. 277. Oral Argument of George B. Young.
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35. C. C. of U. S. Dist. of N. J. In Equity. E. H. Harriman, etc., Complainants, vs. North. Sec. Co. and N. P. Co., Defendants. Second Amended Bill.
36. C. C. of U. S. Dist. of N. J. In Equity. Notice of Motion, Order, Bill of Complaint, and Affidavits.
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39. Depositions and Affidavits submitted for Defendant, North. Sec. Co.
40. Supplementary memorandum of points and authorities for defendant, North. Sec. Co.
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42. U. S. C. C. of Appeals, 3rd Circuit. North. Sec. Co., Appellant, vs. E. H. Harriman et al., Appellees. Brief on behalf of Appellees. (Dillon, Lovett, Evarts.)
43. Brief for the Appellees. (Watson.)
44. Brief for Appellant, North. Sec. Co.
45. S. C. of U. S. Oct. Term, 1904 No. 512. Brief on behalf of Petitioners and Complainants, Harriman et al., Petitioners and Complainants, vs. North. Sec. Co., impleaded with North. Pac.
46. Brief for North. Sec. Co.
47. Brief on behalf of Appellants.
48. Brief for Respondent.
49. Decision of the U. S. Supreme Court.

Since the monograph was written, the various decisions have been published in the customary manner, and the leading references are given below:

Decision of Trial Court, April 9, 1903. 120 Fed. Rep., 721.

First Decision of Supreme Court, March 14, 1904. 193 U. S., 197.

Decision of Circuit Court, April 19, 1904, denying leave to intervene. 128 Fed. Rep., 808.

Decision of Circuit Court, July 15, 1904, granting preliminary injunction. 132 Fed. Rep., 464.

Decision of Circuit Court of Appeals, January 3, 1905, reversing the order. 134 Fed. Rep., 311.

Final Decision of the Supreme Court, March 6, 1905. 197 U. S., 244.

A HISTORY OF THE NORTHERN SECURITIES CASE.

CHAPTER I.

GENESIS OF THE IDEA OF A HOLDING COMPANY.

The certificate of incorporation of the Northern Securities Company was signed by the three incorporators and acknowledged in the state of New Jersey on the twelfth of November, 1901. During the three days immediately following, resolutions were adopted by the newly organized company, authorizing the purchase of any shares that might be tendered to the company, under specified conditions and terms.¹ Power to do so was expressly granted in the charter. "The objects for which the corporation is formed are: To acquire by purchase, subscription, or otherwise, and to hold as investment, any bonds or other securities or evidences of indebtedness. . . . To purchase, hold, sell, assign, transfer, mortgage, pledge, or otherwise dispose of, any bonds or other securities or evidences of indebtedness created or issued by any other corporation. . . . To purchase, hold, etc., shares of capital stock of any other corporation . . . and, while owner of such stock, to exercise all the rights, powers, and privileges of ownership, including the right to vote thereon" ² The nature of these powers, with respect to the signs of indebtedness of other corporations, has caused the company to be commonly described as a holding company.

This particular idea of a holding company antedates the

¹ Proceedings, Board of Directors, 14: 910-913.

² Certificate of Incorporation, Article 3.

Northern Securities Company by seven or eight years;³ and, in a larger sense, the principle involved in the holding company has found at least partial expression in the organization of railway companies for half a century. The voting trust may also be regarded as an antecedent of the modern holding company, and the causes which have produced the one are analogous to those which have produced the other. The process of metamorphosis between the voting trust and the holding company does not appear to be either long or complex.

Both the remote and the immediate causes of the organization of the Northern Securities Company were partly personal and partly economic. They were personal in so far as the Securities Company was the outgrowth of a desire on the part of certain men to perpetuate a certain policy. They were economic in that the execution of certain large, almost empire-building plans could be promoted, in the estimation of its founders, by the Company. The founders of the Company, through years of effort, had become accustomed to associate their railway properties with a certain economic policy. And thus the personal and the economic causes of the organization of the Company practically become merged into one, namely, the desire to insure uninterrupted progress in the building of a great system of transportation. The existence of other causes, like the desire to suppress competition, to inflate values, has been alleged. An examination of these will be taken up later.

The original idea of the Securities Company was that it should embrace the ownership of about one-third of the Great Northern stock. A small number of the Great Northern stockholders, not to exceed eleven out of about 1800,⁴ felt that they were getting along in years. One of them was eighty-six, another eighty-two, and several of them past seventy years of age; and they desired to work together as they had done for more than twenty years. Some of these stockholders lived in foreign countries. Their powers and privileges had to be exercised by their legal representative. This might continue to work satisfactorily as long as the old circle of associates remained unbroken; but a number of them felt that a more per-

³ Hill, Testimony, 24: 43; see also 1: 18; 2: 21, 40; 3: 41, 56, 60, 68; 4: 8; 10: 8, 9; 14: 698; 16: 422; 17: 436-440, 499, 502, 545; 18: 191, 194, 197.

⁴ Hill, Testimony, 14: 698.

manent arrangement would be preferable. A close corporation, embracing six or eight men, was suggested, to which others objected because such an arrangement would violate the principle of equality which had always prevailed among Great Northern stock-holders. As soon as the idea of exclusiveness had been abandoned and an inclusive organization decided upon, "the question came up: Why not put in the Northern Pacific? That is the way it occurred."⁵ This, in substance, is the manner in which President J. J. Hill summarizes what has been alluded to above as the "personal" element in the organization of the Securities Company. And to place at the head of the new company the guiding spirit and constructive genius of that group of men at once made the Securities Company doubly a matter of "moral control,"⁶ of "fortification," and of "strength."⁷ In the words of a colleague, who is familiar with the territory through which the Great Northern railway runs, that road is "regarded as a personality. People know that there is some one whom they can see and talk to. If other means fail, they know they can go to see 'Jim' Hill about it, and he will give them a fair hearing." From the three-fold point of view of public policy, of personality, and of business, the actual course of the organization represents the best that could have been done.⁸

[The desire to secure a permanent basis for the interchange of commodities between great producing sections of the United States and of the Orient may be characterized as the largest economic cause of the organization of the Securities Company. The Great Northern and Northern Pacific railways had lived in comparative peace with each other for twenty years.⁹ Both had maintained joint rates with other roads like the Burlington. The Burlington taps¹⁰ the principal live-stock markets, important cotton, coal and mineral areas of the United States. The unified control and management of these three great systems of railways,—Great Northern, Northern Pacific, and Burlington—makes it possible to

⁵ Clough, Testimony, 14: 814; Kennedy, Testimony, 16: 363; Hill, Testimony, 24: 50.

⁶ Morgan, Testimony, 3: 70.

⁷ Hill, Testimony, 24: 76.

⁸ See also 23: 15-19; 16: 205-209; 339; 17: 454, 658.

⁹ Hill, Testimony, 24: 72.

¹⁰ Hill, Testimony, 14: 671, ff.

secure a sufficient variety and quantity of freight to make systematic back-loading a certainty. Back-loading, together with a steady flow of freight large enough to insure the economical utilization of motive power and car capacity, results in a general economy of operation which makes rates that would bankrupt numerous other roads remunerative to the systems embraced in the Securities Company. Such a flow of freight had been developed on the basis of joint rate agreements with railways and agreements with steamship lines. The value of the railway properties concerned, as well as the continued prosperity of the commercial and industrial interests served by them, depended largely upon the permanency and security of the arrangements which had begun to crystallize with the turn of the century, and to which the opening of the Orient promised to bring still greater returns.¹¹ However, joint rates may be withdrawn at any time, and it was thought too hazardous to build up a great business "extending across the continent and even across the ocean on the basis that tomorrow the rate might be changed or the party with whom we were working to reach the different points of production or consumption had some other interest or some greater interest elsewhere. It was necessary in doing this that we should have some reasonable expectation that we could control the permanency of the rate and that we would be able to reach the markets. In other words, if the man producing lumber on the coast, or cattle on the ranches, or ore in the mines, could not find a market for it and if we could not take it to a market that would enable him to sell his stuff for a profit, he would have to stop producing it. That was the line we worked upon, and that was the reason we felt called upon to put ourselves in a position where we could control access to the markets."¹²

¹¹ See Appendix 2 for the first cargo list of the S. S. "Minnesota."

¹² Hill, Testimony, 14: 670-671.

CHAPTER II.

IMMEDIATE CAUSES OF THE ORGANIZATION.

A glance at a railway map¹³ of the territory west of the Mississippi reveals the importance and strength of the Burlington system. West of the Missouri river it lies in the very lap of the Union Pacific, while east of that river it forms a great bridge, with its terminal pier in Chicago. The Northwestern, St. Paul and Burlington systems largely complement each other in the great manufacturing, agricultural and mineral regions of the greater northwest. In relation to the Great Northern and Northern Pacific, the Burlington is like the point and moldboard of a plow, the beam and handles of which are constituted by the former systems. The Burlington connects Chicago with St. Louis, Kansas City, Omaha, Denver, St. Paul and Minneapolis, and numerous smaller but important cities, which, taken collectively, represent the manufacture and sale of every staple commodity and the raw materials therefor.¹⁴

An alliance with a system possessing the tactical and physical advantages of the Burlington could not be otherwise than a source of strength and profit to the party making such an alliance.

For many years the Great Northern and Northern Pacific had been contemplating direct connection with Chicago. The usual alternatives of the construction of a new line or the lease or purchase of an existing one, presented themselves. The former would result in unnecessary duplication and waste; the latter only was deemed expedient. The improved

¹³ Good maps are found in 14: 969; 17: 814, 900; 19: 504-662. One of these is reproduced in Appendix 10 to this monograph.

¹⁴ A multitude of statements bearing upon the Burlington may be found in 3: 15; 11: 16-23; 14: 671-674, 685, 696; 16: 56-78; 17: 523, 536.

financial condition of the Northern Pacific and the dissolution of the voting trust planned for January 1, 1901, made the year 1900 propitious for the execution of the long cherished plans for an eastward extension. At least five different lines were within the range of possibility. These were: the Wisconsin Central; Chicago & Northwestern; Chicago, Milwaukee & St. Paul; Chicago, Burlington & Quincy; and the Chicago Great Western. To what extent each of these great lines figured as possibilities in the minds of the Great Northern and Northern Pacific, and the relative degrees of desirability which were attached to each by them, does not appear in the testimony, although the statement may be positively made that more than two of these railways were made the subject of correspondence and probably, also, of tentative solicitation.¹⁵

The preferences of J. J. Hill and J. P. Morgan, with respect to the particular line to be acquired as an eastward extension, do not appear to have coincided,¹⁶ when an extraneous factor appeared, which probably added the force of circumstances to Hill's preference. It appears that during the "fall of 1900 or early winter of 1901" the Union Pacific interests purchased in the market some \$8,000,000 or \$9,000,000 out of \$108,000,000 or \$109,000,000 of the Burlington stock.¹⁷ Much of the Burlington stock had been held for many years by people who had inherited it,¹⁸ and it was found impossible to secure control of the property through purchases in the open market. This episode in the stock-market hastened the completion of negotiations which probably had been begun before that time. The two northern transcontinental lines were not inclined to permit a rival interest to wrest from them this much coveted property without leaving a single stone unturned. The testimony does not show a direct causal connection between the attempt of the Union Pacific interests to purchase the Burlington in the open market and the negotiations of Hill for the same property, although more than mere coincidence probably existed. Negotiations were opened by Hill with the executive committee of the board of directors of

¹⁵ Private correspondence.

¹⁶ Young, Brief, 11: 17. Morgan, Testimony, 17: 529.

¹⁷ Hill, Testimony, 16: 74-75.

¹⁸ Hill, Testimony, 16: 76.

the Burlington system about Christmas, 1900, or January 1, 1901. Prior to this date no negotiations had taken place. "The actual negotiations commenced about or after the middle of January, 1901."¹⁹ Early in March, 1901, E. H. Harriman and Jacob H. Schiff, acting for themselves, or for the Union Pacific, or for interests friendly to the Union Pacific, requested to be allowed to join with the Great Northern and Northern Pacific in the purchase of the Burlington.²⁰ This request was refused. At that time the Union Pacific interests no longer owned the eight or nine millions of Burlington stock which had been purchased during the preceding fall or winter, but they now desired to secure a half interest in the final purchase. A month later the Burlington sale was consummated. The two northern roads had made the offer which the Burlington directors had specified beforehand as satisfactory to Hill, and nearly all the Burlington shareholders accepted it.²¹ The Great Northern and Northern Pacific each received one-half of the \$108,000,000 of capital stock of the Burlington at \$200 per share, payable in joint collateral four per cent, long time bonds of the two companies,²² for the payment of which the acquired 96.79 per cent. of the stock of the old Burlington Company, was pledged as collateral security.²³ These two companies had now become joint owners of all the Burlington stock, and, as such, they had the right thereafter to exercise all the rights and privileges of shareholders, including the right to elect the board of directors. The purchase of the Burlington stock by the two companies in equal parts, it was thought, would serve each of them as well as if it were the sole owner of such stock, while such a purchase might have been beyond the financial means of either company by itself. "The evidence is therefore uncontradicted and conclusive that the Great Northern and Northern Pacific companies each purchased an equal number of shares of the Burlington stock as the best means and for the sole purpose of reaching the best

¹⁹ Hill, Testimony, 16: 57-58.

²⁰ Hill, Testimony, 16: 77.

²¹ Various reports regarding the manner in which certain stockholders were induced to part with their stock are in circulation, but I have been unable to confirm them.

²² 19: 505-545, contains copies of the bond, etc.

²³ Hill, Testimony, 16: 67; Beck, Argument, 2: 23-27.

markets for the products of the territory along the lines, and of securing connections which would furnish the largest amount of traffic for their respective roads, increase the trade and interchange of commodities between the regions traversed by the Burlington lines and their connections and the regions traversed or reached by the Great Northern and Northern Pacific lines, and by their connecting lines of shipping on the Pacific Ocean, and as the best if not the only means of furnishing an indispensable supply of fuel for their own use and for the inhabitants of the country traversed by their lines. These connections and the interchange of traffic thereby secured were deemed to be and are indispensable to the maintenance of their business, local as well as interstate, and to the development of the country served by their respective lines, and of like advantage to the Burlington lines and the country served by them, and strengthen each company in its competition with European carriers, for the trade and commerce of the Orient."²⁴

During the very days when the Burlington transaction was being perfected, the men who had been refused what they regarded an equitable share in that purchase elaborated plans which were calculated to vanquish their enemies and elevate the Union Pacific interests to a position of supremacy in trans-continental traffic. These stirring events led a cosmopolitan editor to invent a parable of fishes in which the bass had swallowed the minnow, and the pike swallowed the bass. In this instance, however, the bass, armed with retirement fins, compelled the pike to spew him out.

The total outstanding capital stock of the Northern Pacific was \$155,000,000 of which \$80,000,000 was common and \$75,000,000 preferred. During April and early in May, 1901, the Union Pacific interests acquired \$78,000,000 of this stock,—\$41,000,000 preferred and \$37,000,000 common—with the view of controlling the Northern Pacific railway, with its half interest in the Burlington system. Such a movement appears to have been anticipated. "It was a common story at one time."²⁵ Individuals representing the Great Northern and

²⁴ Young, Brief, 11 : 21.

²⁵ Morgan, Testimony, 17 : 536.

Northern Pacific interests, becoming apprehensive, increased their holdings in the Northern Pacific by purchasing about \$15,000,000 of common stock in the market.²⁶ Short selling of Northern Pacific stock and the scramble to cover, when it was discovered that only a limited supply was to be had, drove the price of Northern Pacific common stock up to about \$1,000 per share. This was the climax of a series of events which culminated in the stock-exchange crisis of May 9, 1901.²⁷ "The markets of the world were convulsed, the equilibrium of the financial world shaken, and many speculative interests in a critical condition."²⁸ On May 1, 1901, when the so-called "raid" upon Northern Pacific stock became known, J. J. Hill and his associates, who had been in possession of large blocks of Northern Pacific stock from the time of the reorganization of the company, were holding from \$18,000,000 to \$20,000,000, par value, of common stock; and J. P. Morgan & Co. were holding some \$7,000,000 or \$8,000,000.²⁹ Together, May 1, 1901, these individuals lacked the dramatic \$15,000,000 of common stock, which, when they had acquired it, gave them a majority of some \$3,000,000 par value, and of the \$80,000,000 of common stock, when the "show down of hands" occurred after May 9. Although the Union Pacific interests represented by E. H. Harriman and Winslow S. Pearce, as trustees for the Oregon Short Line, held a majority of \$1,000,000 of the total amount of stock, their majority lay in the preferred shares which could be retired on any 1st of January prior to 1917,³⁰—that is, before the present owners could get an opportunity of exercising the authority which was assumed to reside in them, and which would give them the coveted control. This is why the pike did not swallow the bass. To the country at large and to Wall Street these events appeared like a duel be-

²⁶ Morgan, Testimony, 17: 539.

²⁷ Some competent spectators did not regard the Northern Pacific corner and the preceding events which were directly connected with it as the cause of the panic of May 9. "It was the concurrent condition of the money market that gave an atmosphere of desperation to the general surroundings." Banks were unable or unwilling to extend accommodations, loans had to be called, the public had engaged in wholesale speculation, etc. All these things combined to increase the intensity of the popular craze. See the *Commercial and Financial Chronicle*, Vol. 72:744, 842, 900, 908, 958.

²⁸ Beck, Argument, 2: 20.

²⁹ Young, Brief, 11: 31-32; Hill, Testimony, 16:78-81; Nichols, Testimony, 16: 325-332.

³⁰ Resolution of Board of Directors, 17: 879.

tween giants, but one who appears to have been a leading participant in the duel, on the losing side, asserted that he never was in a contest,³¹ nor did he and his associates lose money.³²

According to the by-laws of the Northern Pacific Company, the annual election of its board of directors by the stockholders occurs in October, and under the distribution of stock existing after May 9, 1901, the Union Pacific interests could have controlled this election, and thus prevented the retirement of the preferred stock on January 1, 1902, which would legislate them out of control. Both the preferred and the common stock could vote under the conditions existing on May 9, 1901. A postponement of the annual meeting from October till after January 1, 1902, was frequently thought of and advised by counsel. It could have been done.³³ This potential power of retiring the Northern Pacific preferred stock before the same could be voted, residing in the Northern Pacific Board of Directors, appears to have generated a conciliatory attitude on the part of the representatives of Union Pacific interests, and negotiations for the purchase of such shares were successfully carried through by J. P. Morgan & Co. Direct testimony admitting this causal connection does not exist, but the admitted facts make it appear highly probable. To be sure, the retirement of the preferred stock had been thought of long before, and the right to do so on any 1st of January between 1896 and 1917 was expressly reserved;³⁴ yet up to 1901, when this plan was finally consummated, no plan had been devised for the retirement of that stock.³⁵ The interested parties agreed not to wait until October, but to act at once, in order to establish permanent peace and "to show that there was no hostility."³⁶ The detailed movements³⁷ following the 9th of May do not appear clearly from the evidence, but the results of what took place are indicated in the bulletin published on June 1st. "It is officially announced that an understanding has been reached between the Northern

³¹ Harriman, Testimony, 19: 612, 618.

³² Harriman, Testimony, 19: 616.

³³ Young, Brief, 11: 33; Hill, Testimony, 16: 134-138; Morgan, Testimony, 17: 542.

³⁴ Resolution, 17: 879.

³⁵ Morgan, Testimony, 17: 567.

³⁶ Morgan, Testimony, 17: 542.

³⁷ Hill, Testimony, 16: 123-131; Morgan, Testimony, 17: 545.

Pacific and the Union Pacific interests, under which the composition of the Northern Pacific board will be left in the hands of J. P. Morgan. Certain names have already been suggested, not now to be made public, which will especially be recognized as representative of the common interests. It is asserted that complete and permanent harmony will result under the plan adopted between all interests involved."³⁸ This "understanding" had been incorporated in the Arbitration Agreement of May 31, 1901, which the bulletin just quoted announced to the public, and which gave "every important interest its representative." In it the "vitality and vigor of the peace policy established between the railroads" found definite expression.³⁹ It showed "that they were acting under what we know as a community of interest principle, and that we were not going to have that battle in Wall Street. There was not going to be people standing up there fighting each other."⁴⁰ Had this battle in Wall Street been fought to the last ditch and the Union Pacific interests triumphed, the measure of the injury done to the Great Northern and Northern Pacific would have been destruction, in the judgment of those who are responsible for the administration of these properties,—destruction in the sense that the properties would have been incapacitated from doing what it was intended they should do and what they were quite able to do⁴¹ in building up a great interstate and Oriental traffic, unless they had all gone into a single combination. "With the Northern Pacific as a half owner in the shares of the Burlington and responsibility for one-half of the purchase price of these shares, the transfers of the shares of the Northern Pacific or the control of the Northern Pacific to an interest that was adverse or an interest that had greater investments in other directions, the control being in the hands of companies whose interests would be injured by the growth and development of this country would, of course, put the Great Northern in a position where it would be almost helpless, because we would be, as it were, fenced out of the territory south which produces the tonnage we want to take

³⁸ Beck, *Argument*, 2: 34.

³⁹ *Com. & Fin. Chronicle*, Vol. 73: 104, 978.

⁴⁰ Morgan, *Testimony*, 17: 543, 569; Harriman, *Testimony*, 17: 569.

⁴¹ Hill, *Testimony*, 14: 693-697, 742.

west and which consumes the tonnage we want to bring east, and the Great Northern would be in a position where it would have to make a hard fight—either survive or perish, or else sell out to the other interests. The latter would be the most business-like proceeding.” With the view of preventing the possibility of future “raids” upon the Great Northern and Northern Pacific stock and of fortifying these two roads and their connections in their competitive struggle with “the Suez Canal and the high seas and the entire world,”⁴² the idea of a permanent holding company was invented. It has been persistently denied that the desire to restrain competition among the constituent companies had anything to do with the organization of the Northern Securities Company.⁴³

⁴² Hill, *Testimony*, 14: 695.

⁴³ The question of competition will be taken up specifically in Chapters V and VI.

CHAPTER III.

THE ORGANIZATION.

The organization of a holding company having been determined, it was necessary to decide upon the form and contents of a charter, or articles of incorporation, and the state in which the incorporation should take place. The general nature of the contents of such a charter had been discussed practically as long as the idea of a holding company had been entertained by the men interested in the matter;⁴⁴ namely, for something like seven or eight years. The specific nature of such a charter for this particular company was not made the object of study until after the Arbitration Agreement of May 31, 1901. About this time several men began an examination of the laws of a number of states for the purpose of discovering a suitable charter and of deciding upon the state in which the company should be incorporated. The decision with reference to the place of incorporation was not made until a few days before the company was actually incorporated.⁴⁵ The general aim in searching for a charter and a state "was to have beyond any question the power to purchase, own and hold and dispose of corporate securities on a large scale."⁴⁶ Between June and October several different sketches of articles of incorporation were made⁴⁷ and submitted to seven or eight men. These men were scattered so that no formal meeting for the consideration of the articles was ever held.⁴⁸ The sketch referred to left blank the name of the corporation, the name of the state in which it was to be incorporated, and the amount of the capital stock. "There was practically no change in the

⁴⁴ Clough, Testimony, 14: 819.

⁴⁵ Clough, Testimony, 14: 826, 831.

⁴⁶ Clough, Testimony, 14: 829.

⁴⁷ Beck, Argument, 2: 43.

⁴⁸ Clough, Testimony, 14: 821, 829.

substance of it from the beginning."⁴⁹ Among the earliest efforts was a search for a special charter granted by the territory of Minnesota prior to the adoption of the constitution of 1858. "A large number of special charters that were passed when Minnesota was a territory have been very much sought after and extensively used by railroads that have since been built, by financial institutions of various kinds and business corporations."⁵⁰ The old enactments were glanced through with a view of seeing if there was anything that would meet the desires and purposes of the contemplated organization, because "under our constitution all charters ante-dating the admission of the state into the union became fixed legislative contracts."⁵¹ Such a special, territorial charter could, however, not be found; nor could a later charter suitable for the occasion be discovered. Hence, recourse was had to the general incorporation laws of Minnesota, New York, New Jersey, and probably also of West Virginia.⁵² The Minnesota statutes were regarded as too "new in that class of corporations. There are no large business corporations incorporated under the laws of the State of Minnesota; she never has had any. There has been no occasion to put powers that are given by her general statutes to such organizations under judicial question."⁵³ Furthermore, her own citizens, it was asserted, go to other states for the incorporation of enterprises of any magnitude.⁵⁴ Whether West Virginia was any more than mentioned in this connection does not appear. As between the statutes of New York and New Jersey, the choice fell upon the latter because they had been in force a good many years and were regarded as "thoroughly well settled." Those of New York, on the other hand, while they were quite similar to those of New Jersey, and "had evidently been passed with a view of enlarging her legislation to put it on a parity with New Jersey," were of very recent origin, and had not been construed by the courts.⁵⁵ In this connection, reference may

⁴⁹ Clough, Testimony, 14: 828.

⁵⁰ Clough, Testimony, 14: 817-818.

⁵¹ Clough, Testimony, 14: 817.

⁵² Clough, Testimony, 14: 824.

⁵³ Clough, Testimony, 14: 830.

⁵⁴ Young, Brief, 11: 57.

⁵⁵ Clough, Testimony, 14: 825.

be made to a pamphlet entitled "Advantages of the General Corporation Act of New Jersey,"⁵⁶ published without reference to the Securities Company, in which the author of it points out that since 1846 the policy of New Jersey towards capital has been that of "liberality." The changes introduced in the law since then have made it "simpler, more liberal and less burdensome. Since 1896, when the law was again revised and codified, its salient features have been simplicity of organization and management, freedom from undue publicity in the private affairs of the company, and facility of dissolution."⁵⁷

The charter, which was finally taken out in the state of New Jersey, is in many respects similar to the charters of other great corporations. It has many points in common with the charters of the United States Steel Corporation, and the Standard Oil Company, except that the Northern Securities charter does not grant the omnibus powers conferred by the others. The Standard Oil Company and the United States Steel Corporation can engage in practically every conceivable kind of enterprise, while the Northern Securities charter limits the company to the acquisition of valuable paper held by domestic and foreign corporations, exercising the rights of property over the same, aiding corporations whose paper is thus held, and acquiring and holding the necessary real and personal property.¹ The amount of the capital stock with which the corporation began business was thirty thousand dollars, while the total authorized capital stock of the corporation is four hundred million dollars. The customary officers and committees are provided for and the usual powers conferred upon them.⁵⁸ A board of fifteen directors was elected, six of whom represented Northern Pacific interests; four, the Great Northern, not counting the president; three, the Union

⁵⁶ Published by the Corporation Trust Company.

⁵⁷ Leading references on the search for a charter:

Brief for Defendants, 1 : 19;

Beck, Argument, 3 : 42-60;

Brief of Complainant, 10 : 18, 45;

Young, Brief, 11 : 57;

Clough, Testimony, 14 : 820-844; 16 : 238, 253, 318;

Morgan, Testimony, 18 : 354.

⁵⁸ The by-laws are printed in 17 : 804-814.

Pacific; and two, unclassified.⁵⁹ The composition of the board on the community of interest plan was one of the points of attack subsequently pursued by the state and federal authorities. Such an arrangement had numerous precedents, however. Chauncey M. Depew is an officer or director of fifty-six transportation companies; W. K. Vanderbilt of fifty-one; Geo. J. Gould of thirty-five; E. V. Rossiter of thirty-one; E. H. Harriman of twenty-eight; Charles F. Cox of twenty-seven; D. S. Lamont of twenty-four; J. P. Morgan of twenty-three, and so on through a list of more than a hundred names.⁶⁰

Much testimony was elicited with respect to the capitalization and the ratio at which the Northern Pacific and Great Northern shares were exchanged for Northern Securities stock.⁶¹ It seems that the capitalization of \$400,000,000 was fixed at that figure in order to cover approximately the combined capital stock of the Northern Pacific and Great Northern at an agreed price apparently based upon earning capacity. The par value of the outstanding capital stock of the Great Northern was \$123,880,400.00 and that of the Northern Pacific amounted to \$155,000,000.00. The Northern Securities Company purchased about seventy-six per cent of the former and ninety-six per cent of the latter, on the basis of \$115.00 per share of \$100 of Northern Pacific and \$180.00 per share of \$100 of the Great Northern. The purchase of the stock of the two railway companies by means of the shares of the Securities Company was effected by and through the stockholders as such. An offer to make the purchase was conveyed to the Great Northern stockholders in a circular letter.⁶² This circular called forth numerous inquiries, in response to which President Hill sent out a letter⁶³ setting forth the purposes of the company and suggesting that "the offer of the Securities Company is one that Great Northern shareholders can accept with profit and advantage to themselves." It was the expressed wish of the leading stockholders of the Great Northern that all of them should be dealt

⁵⁹ See table, 2: 59; 17: 814; 24: 136-138.

⁶⁰ Compiled from the *Directory of Directors for New York*, 1902.

⁶¹ Leading references upon this point: 10: 4-6; 14: 789, 910-20; 16: 79, 119-144, 168-183, 324-350, 416; 17: 532-554, 575; 24: 58-64; 25: 78.

⁶² Printed, 14: 918

⁶³ Printed, 14: 920.

with on a basis of absolute equality, irrespective of the amount of their holdings. This appears to have been done. In case of the Northern Pacific no circular letter appears to have been sent out to stockholders;⁶⁴ nor were the same rules of equality applied to them, for the Union Pacific interests received a cash premium of \$8,915,629.00 in the exchange of their Northern Pacific holdings on the agreed basis for \$82,492,871.00 par value of the Northern Securities stock. It also seems that the promoters of the Northern Securities Company had an understanding with the holders of at least a majority of the common stock of the Northern Pacific Railway Company that they would exchange that stock for the stock of the Northern Securities Company as soon as organized; and also an agreement that the preferred stock of the Northern Pacific should be retired on the first day of January following.⁶⁵

⁶⁴ Such a letter is, however, implied in Volume of Pleadings, 12: 35.

⁶⁵ Complainant's Brief, 10: 41.

CHAPTER IV.

ACTION OF THE STATE AUTHORITIES.

One week after the Northern Securities charter had been granted, the following statement was issued from the office of Governor Van Sant of Minnesota:⁶⁶ "Owing to the great interest of the people of the states west of us and of the great desire to see the attempt to consolidate the Great Northern and Northern Pacific Railway lines resisted, Governor Van Sant has concluded to invite the Governors of the states having anti-consolidation laws similar to those of Minnesota to join in an effort to fight the great railway trust. It is understood that a conference of the governors is to be planned to consider the best methods of fighting the Northern Securities Company's propositions in the courts and by new legislation, if necessary." The replies of the governors addressed varied. The governor of North Dakota stated that his state had very little law bearing upon the question. In the constitution the consolidation of parallel and competing lines is specifically prohibited, and there are some general enactments prohibiting the formation of trusts and pools for the purpose of hampering trade and commerce. The governor of South Dakota thought that the railways in the merger had so little mileage in his state that any action there would be of no moment. The absence of constitutional provision or law in Idaho caused the governor of that state to regret that he could consequently render no material aid in the contest, but he thought that the matter would be made the subject of action by the next legislature. When Oregon repealed her commission law in 1898, practically all railway legislation was wiped out with it. The governor of Oregon wrote Governor Van Sant that the people

⁶⁶ Quoted, *Com. & Fin. Chron.*, Vol. 73, p. 1112.

of that state were so well satisfied with the treatment that they had received from the railways that the legislature had ignored his recommendation in two successive messages that the anomalous condition as to the control of railroads be changed. The governor of Washington replied that his state had a clause in its constitution prohibiting general monopolies, but no special provision as to the union of railways. However, he promised hearty co-operation to the extent of his ability. The governors and attorneys-general of the states mentioned held a conference at Helena, Montana, on December 31, 1901, and unanimously adopted the following resolution: "In our opinion the consolidation or threatened consolidation of the Great Northern, Northern Pacific, and Burlington Railway systems in the several states through which they run as parallel or competing lines is contrary to sound public policy, and also, with the exception of Idaho, is in violation of the constitution or laws of said states, and mindful of the obligation which the law imposes in such cases upon the officials of the several states here represented, we hereby give our unqualified approval and indorsement to any proper and suitable proceeding which may be instituted in any court having jurisdiction by the sovereign state of Minnesota, or any other state affected thereby, designated, designed, and intended to speedily and finally test and determine the validity of such consolidation or threatened consolidation. And further, we unanimously protest against any combination or consolidation which restricts or stifles free competition in the trade or commerce of the country."

One week later, namely, on January 7, 1902, Attorney-General Douglas of Minnesota, in behalf of the state, appeared before the supreme court of the United States and moved the court for leave to file a bill of complaint against the Northern Securities Company. The court⁶⁷ answered that "the general rule in equity is that all persons materially interested, either legally or beneficially, in the subject-matter of a suit, are to be made parties to it; and the established practice of courts of equity to dismiss the plaintiff's bill if it appears that to grant the relief prayed for would injuriously affect per-

⁶⁷ 194 U. S., 199-247.

sons materially interested in the subject-matter who are not made parties to the suit, is founded upon clear reasons, and may be enforced by the court, *sua sponte*, though not raised by the pleadings, or suggested by counsel.

"The bill discloses that the parties to be affected by the decision of this controversy are, directly, the state of Minnesota, the Great Northern Railway Company, and the Northern Pacific Railway Company, corporations of that state, and the Northern Securities Company, a corporation of the state of New Jersey, and, indirectly, the stockholders and bondholders of those corporations, and of the numerous railway companies whose lines are alleged to be owned, managed or controlled by the Great Northern and Northern Pacific Railway Companies; and it is obvious that the rights of the minority stockholders of the two railroad companies are not represented by the Northern Securities Company."

The denial of the court is expressed in the concluding paragraph of the decision in the following language: "As then, the Great Northern and the Northern Pacific Railway Companies are indispensable parties, without whose presence the court, acting as a court of equity, cannot proceed, and as our constitutional jurisdiction would not extend to the case if those companies were made parties defendant, the motion for leave to file the proposed bill must be and is *denied*."

This decision of the supreme court was rendered on February 24, 1902. Thereupon the attorney-general of the state of Minnesota brought suit in the state court. The bill alleged a right of recovery under the Sherman Anti-Trust Act, contending that as a shipper the state could maintain an action under the federal act. This, it was thought, gave a right of removal to the United States circuit court, where the suit was tried. The state of Washington also applied to the United States supreme court for leave to file a bill in that court. Such leave was granted, the bill was filed, and the defendants answered. Nothing further was done in that case.

The case of the state of Minnesota against the Securities Company is outlined in the brief of complaint and volume of pleadings before the United States circuit court for the district of Minnesota, and in the bill of complaint before the

United States supreme court. The action was brought by the state of Minnesota "in its capacity as a governmental or sovereign body on behalf of all the people of the state, and also in its individual or corporate capacity for the purpose of enjoining the consolidation of the Great Northern and Northern Pacific Railway companies."⁶⁸

In its individual capacity, it was argued, the state is a land-owner and shipper. As a sovereign body, the state sought to enforce compliance with its statutory and constitutional provisions relating to the consolidation or combination of competing or parallel lines of railway and to combinations in restraint of trade. It sought a vindication of "the majesty of its own laws."⁶⁹ Minnesota has an anti-trust law which is essentially like the federal anti-trust law of 1890 in so far as it forbids contracts, combinations or conspiracies in restraint of trade; and since a discussion of the federal law constitutes the chief topic in the part of this monograph dealing with the action of the United States government, no extended reference to arguments upon this point of the case is necessary here. The statutes which particularly come under consideration in this place are the following: "No railroad corporation, or the lessees, purchasers or managers of any railroad corporation, shall consolidate the stock, property or franchise of such corporation with, or lease or purchase the works or franchise of, or in any way control any other railroad corporation owning or having under its control a parallel or competing line, nor shall any officer of such railroad corporation act as an officer of any other railroad corporation owning or having the control of a parallel or competing line."⁷⁰ And again, "No railroad corporation shall consolidate with, lease or purchase, or in any way become the owner of or control any other railroad corporation or stock, franchises, rights, or property thereof, which owns or controls a parallel or competing line."⁷¹ The Great Northern Railway was chartered by the state of Minnesota, while the Northern Pacific was originally chartered by the federal government

⁶⁸ Brief of Complaint, 10:1, 112.

⁶⁹ Same, 10:115.

⁷⁰ Sec. 1, Ch. 29, Laws of Minn., 1874, quoted, 10:2.

⁷¹ Laws of 1881, quoted, 10:2.

and later re-chartered by Wisconsin; but having subsequently filed its charter in Minnesota, both railway companies were clearly within the jurisdiction of the state. The question of jurisdiction was not an important point at issue.⁷² The crucial point in reference to the two Minnesota laws quoted is whether or not the Great Northern and Northern Pacific are parallel or competing lines within the state of Minnesota. Counsel for the state answered the question in the affirmative, these railways "having upwards of thirty junction points within the state and running generally parallel to each other, and only a very few miles apart, through a large portion of their extent in the state of Minnesota." A glance at the map will show that physically the two railways are clearly parallel with each other; at least, quite as parallel as scores of other roads generally regarded as being parallel. But aside from physical location, and with reference to traffic, counsel for the defense presented arguments showing that in reality only a small percentage of the total interstate traffic was competitive; and, in addition, the statement of Hill, previously referred to, that the two roads had lived in "unbroken peace"⁷³ with each other for about twenty years, with the exception of a threatened war which lasted only a few hours, should be recalled. No active, general competition was in existence at the time the Securities Company was organized. It was argued that less than three per cent of the total interstate traffic of the two companies was subject to control by them individually in the making of rates. In other words, ninety-seven per cent of the total interstate traffic of the two companies was being carried under joint tariffs, such tariffs being in force with eighteen railway companies west of the Missouri river and with 120 companies east of that river. The following is an analytical table of the traffic of the two roads:⁷⁴

⁷² The question was raised, however, and argued. See 10: 94, ff.

⁷³ 24: 67.

⁷⁴ M. D. Grover, Brief, 7: 42-44.

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- (a) The percentage of interstate traffic on the lines of the defendant companies which can be controlled by joint action of the companies is as follows:

Great Northern	2 78
Northern Pacific	2 89

Percentage of interstate traffic, the rates on which can be controlled by joint action of defendants with connecting lines:

Great Northern	65
Northern Pacific	4 90

Percentage of interstate traffic, the rates on which can be controlled only by agreement with lines competing with the defendants:

Great Northern	6 89
Northern Pacific	2 58

Percentage of interstate traffic, the rates on which can be controlled only by agreement with lines competing with defendant companies and with connecting lines:

Great Northern	17 09
Northern Pacific.....	13 25

Percentage of interstate traffic moving between stations on line of Great Northern Company, neither of which is reached by lines of the Northern Pacific

72 59

Percentage of interstate traffic moving between stations on line of Northern Pacific Company, neither of which is reached by lines of the Great Northern.....

76 38

- (b) Interstate business forwarded from and to towns reached by lines of the defendant railway companies only:

Great Northern	\$471,218 88
Northern Pacific	554,395 24

Total interstate business, both companies:

Great Northern	\$16,920,906 00
Northern Pacific	19,253,852 00

Making due allowances for the possibility of error, it seems reasonably clear that only an inappreciable portion of the total traffic is strictly competitive. To what extent this small percentage reacts, or can react, on the level of non-competitive

rates, through the action of the long and short haul clause, is a question which nothing but a detailed analysis of the total traffic by commodities can answer; and for this, the data are not at hand. It was the contention of the state that competition has been suppressed to the disadvantage of certain public and private interests. It was represented that the state of Minnesota now has left and unsold more than three million acres of public lands donated by congress and valued at fifteen millions of dollars. Much of this land is located in the regions traversed by the Great Northern and Northern Pacific railways, and its salability, as well as its market value, it was argued, depends in a very large measure upon the free and uninterrupted competition of the two railways. Nor will settlements be made as rapidly as heretofore, because such settlements depend largely upon the construction of branch lines into unsettled regions. The necessity for rivalry to secure the traffic of the new settlements no longer exists; and, all these things put together, will greatly retard the development of the more remote parts of the state. Again, the state is a shipper. It owns and maintains a university, hospitals, normal and industrial schools, schools for the deaf, dumb, blind, feeble-minded, indigent and homeless children. These institutions necessitate the purchase of large quantities of supplies, a great portion of which must be shipped over the lines of the Great Northern and Northern Pacific railway companies; and the absence of competition among the two railway companies may compel the state to pay higher rates and suffer the loss therefrom in increased taxation.⁷⁵

The president of a normal school testified⁷⁶ that the agents of the two companies had visited his institution for the purpose of inducing students to travel between the school and their homes over their respective lines. In certain instances special cars, even, had been provided. This had not been done since the organization of the Securities Company.

Reference was also made to the large areas of land given by the state in aid of railways, which was met by counsel for the railways by the statement that the state of Minnesota had

⁷⁵ Pleadings, 12: 18-24, 26, 36.

⁷⁶ 17: 681-687.

acted only in a fiduciary capacity in regard to these lands by executing a trust imposed upon it by the federal government; and that the state could consequently not use arguments based upon aid given through land grants.

The state claimed that "not only was all competition, so far as rates were concerned, withdrawn or destroyed, but all effort to secure business and all the benefits resulting therefrom to shippers on the lines of said railroads within the state of Minnesota, were absolutely destroyed; spur tracks and sidings, which had been constructed in order to obtain competitive business and give conveniences and facilities to shippers on the Great Northern line who might otherwise ship via the Northern Pacific were abandoned and removed and shippers were left to get their grain and products to the Railway Company as best they could; and when complaint was made to the Great Northern Railway Company's agents, accompanied with threats to transfer their business to the Northern Pacific unless these conveniences were restored, they were informed that it made no difference to the Great Northern whether it or the Northern Pacific got the business."⁷⁷ The destruction of competition was partly attributed to a joint circular letter, commonly spoken of as the equalizing circular, sent out to freight agents at nineteen junction points on January 23, 1902.⁷⁸ The essential parts of this circular read as follows:⁷⁹ "Freight shipments from one junction point to another junction point, will be forwarded via the line having the shorter mileage and lower rates; the longer line will not undertake to equalize the rates based on the shorter mileage of the other. Freight from a junction

⁷⁷ Brief, 10: 15.

⁷⁸ Printed in 17: 901.

⁷⁹ The freight circular relating to rates between junction points was issued principally because of the provision in the Minnesota law which forbids charging more for a shorter than for a longer distance over the same line in the same direction on the same class of freight. The law is absolute and does not contain the qualifying phrase of the interstate commerce law "under similar circumstances and conditions." The Northern Pacific Company, in making the same rate as the Great Northern between junction points, was under legal obligation to make no higher rate from an intermediate point to a junction point. The circular was issued because the company having the larger line could not afford to adopt an intermediate rate as low as the rate made by a short line between junction points. The Northern Pacific applied to the Commission for leave to adopt the same rate between junctions as made by the shorter line, at the same time maintaining a higher intermediate rate. This application was denied.

point destined to a local point on the other company's line may be accepted if the joint rate made on the sum of the locals of both companies is less than the rate of the company on whose line the local point is located, for example, Rates made by combination of local rates will not include any transfer charges at junction points. . . ." A witness was introduced who testified⁸⁰ that after the issuance of this equalizing circular the choice of routes which he had enjoyed for five years or more, at the same rates, had been denied to him, and that the rate had also been advanced. The former privileges and rates were restored through the withdrawal of the equalizing order on March 27, 1902. Between the dates of issuance and withdrawal of the circular, both the state and federal governments were active in their suits against the Securities Company, and counsel for the state draws the conclusion that the withdrawal was due to the suits. Business considerations, however, entered into the question of the equalizing circular which were not brought out in the testimony, as the following statement by President Hill and the accompanying map will show: "The equalizing circular enabled the Northern Pacific Railway Company to carry freight over its long line at the short line rate of the Great Northern Railway. Mr. Wright's testimony refers to shipments of caskets from Fergus Falls, Minn., to Moorehead, Minn. The distance via the Great Northern Railway is 54 miles, and the rate 28 cents per 100 pounds. The Northern Pacific Railway Company under its equalizing circular applied the 28 cent rate over its line, a distance of 142 miles. On January 25th, 1902, the Great Northern Railway and Northern Pacific Railway Companies issued tariffs reducing the freight rates of merchandise about 15 per cent in Minnesota and the Dakotas. Under these revised tariffs the rates from terminal points, namely, St. Paul, Minneapolis and Duluth were 95 per cent of the rates charged on the same class of freight for the same distance from interior points, such as Fergus Falls, etc. In order to carry out this new principle establishing a fixed relation between the terminal points and country shipping points, the application of short line rates via circuitous routes was abandoned by

⁸⁰ Wright, Testimony, 17: 675-681.



both the Northern Pacific and Great Northern Companies. This resulted in the Northern Pacific discontinuing the handling of freight shipments from Fergus Falls to Moorehead over their long line at the rate established over the Great Northern Railway. The attached memorandum⁸¹ shows rates applicable on burial cases under the old and the new conditions. If the Great Northern and the Northern Pacific Companies had continued their previous practice of applying short line rates via circuitous routes, it would have resulted in establishing lower rates for the same service from country stations than we were charging from terminal points. This was considered objectionable, as the basis so applied might eventually be used as an argument for a further reduction in rates from the terminals."

Another witness⁸² related that he had enjoyed the use of a spur and side-track of the Great Northern about one-third of a mile distant from his farm buildings, which was taken up after the organization of the Securities Company, compelling him to ship "from 10,000 to 15,000" bushels of wheat from another station about two and a half miles away on the Northern Pacific. When this siding was built, some fifteen years ago, the witness gave the right of way and the company provided the material. The witness also remarked concerning the decline of farm house solicitation for business on the part of the two railway companies. Special inquiries regarding the alleged changes in soliciting business and the abandonment of spur tracks and sidings elicited the reply that "no material changes have been made in our methods of soliciting traffic since 1900."⁸³ Farmhouse solicitation still exists. "It is confined principally to shippers delivering grain direct from the threshing machine to cars; the railway company endeavoring to learn the needs of such shippers in advance in order to furnish sufficient cars to avoid a suspension of threshing operations. Such farmers cultivate large areas, commonly termed 'Bonanza Farms' which are becoming fewer every year. Thus the necessity for this class of solicitation

⁸¹ Consult Diagram I on opposite page.

⁸² Addison Leech, 17: 704-718.

⁸³ Private Correspondence.

is diminished correspondingly."⁸⁴ The matter of abandoned side-tracks was explained in the following manner:⁸⁵ "The only farmer's side track taken up by this company in years is the one mentioned in Leech's testimony. This track was built to accommodate the shipments of the Leech farm, when it occupied an area of about 8,000 acres. At that time Leech built an elevator at the end of the track, which was destroyed by fire about 1897, and not rebuilt. The farm having been greatly reduced in area, Mr. Leech evidently no longer considered an elevator necessary to accommodate his grain. Shortly after the destruction of this elevator, it developed that the track needed repairing, involving an expenditure of nearly \$4,000.00, in order to put it in shape to handle cars with safety. Subsequent to the building of this side track, we located Addison Station at the junction with our through line. Elevators were built and a trading community established there, thus accommodating many of the farmers shipping from land previously owned by Leech. This deflection of business from Leech's spur to Addison Station with the gradual decrease in business controlled by Leech indicated clearly that we would not be justified in the expense necessary to continue the operation of this spur track and it was taken up." Two other witnesses⁸⁶ spoke of the greater difficulty at present encountered in securing empty cars and the comparative lack of promptness in having loaded cars taken away. "They ran their switch engine out once or twice with cars expressly for us this year. But heretofore they used to run their switch engine out pretty nearly every day."⁸⁷ The following remarks bear upon this point:⁸⁸ Various considerations affect the supply and movement of cars. Some grain shipping stations receive more cars under load with freight than others, thus providing to some extent cars for shipping grain. In many instances we are obliged to haul cars empty to shipping points, the time consumed in supplying them depending upon the distance transported. Some

⁸⁴ Private Correspondence.

⁸⁵ Private Correspondence.

⁸⁶ Ewald Weidemann and Theo. F. Koch, 17: 719-731.

⁸⁷ 17: 729.

⁸⁸ Private Correspondence.

shippers have better shipping facilities than others and load more cars in a given time. Freight train service depending upon the volume of business is more frequent on lines where the traffic is greatest.

"Weidmann and Wagner in their testimony intimated that our company had discontinued soliciting their carload shipments of agricultural products. This was due to a change in our agents in Moorehead, Minn., under which the new agent neglected to pursue the method of solicitation of handling their business that had been followed by his predecessor. There was also a brief interval during the period covered by their testimony during which cars were very scarce and we were unable to supply them as promptly as in previous years. This was a temporary condition and has not existed since. The cars are promptly taken forward after they are loaded, excepting in cases where shippers fail to furnish shipping instructions promptly or when passing trains are unable to handle any additional cars. Such cases are an exception and not the rule."

Another argument related to shipments of grain and other products from competitive places in the western part of Minnesota to Duluth, St. Paul, and Minneapolis. It was shown that enormous quantities of such products, owned and produced by citizens and inhabitants of the state, were shipped to these markets. The destruction of competition, it was argued, would result in inferior service and increased rates.⁸⁹

J. P. Morgan⁹⁰ "never knew two roads yet that didn't compete," but such statements can only be accepted in their loosest figurative sense. Competition as a regulative principle of railways and as a force which will maintain proper relations between the railways themselves and the railways and the public has failed in every country of the world where it has been given a trial, and on *a priori* grounds one would be obliged to assume, in the light of experience, what the analytical table of traffic illustrates, that no free and comprehensive competition did exist between the Great Northern and Northern Pacific railways; nor could such competition exist

⁸⁹ 13: 5.

⁹⁰ Testimony, 17: 533.

in the long run. Hence, whatever may be said for and against the Securities Company, it can scarcely be maintained that it has affected the competitive relations of the two companies in any substantial manner. In regard to the Burlington, these relations are said to have remained unchanged. Since the organization of the Securities Company, as before, both the Great Northern and Northern Pacific authorities have "pestered"⁹¹ the Burlington for business from that road. This business has been, and still is, divided between the two on a basis proportionate to the freight received by the Burlington from each, unless shippers order it routed otherwise.⁹² In a word, then, the Great Northern and Northern Pacific railways are parallel and competing in so far as physical location is concerned, and with respect to a relatively small part of their interstate traffic. They are not, and have not been, competitive with respect to any but an inappreciable part of their total traffic. From the point of view of physical location, the two railways are parallel, and if the purchase of shares of competing carriers by a single interest is forbidden by the law, which, it is claimed is not the case, the law has plainly been violated. It has also been violated from the point of view of potential or "inactive" competition. If "competitive" railways, in the eyes of the Minnesota law, are railways which compete for the greater part or substantially all of their traffic, the law has not been violated; but it has undoubtedly been violated if "competitive" means competitive to any extent whatsoever, and not competitive in regard to the whole of the traffic; provided that the purchase of the shares was in itself an illegal act. If the courts should hold that unity of ownership of shares is not a consolidation of the property of the two railway companies it is difficult to see how the law can be made to apply.⁹³

⁹¹ Darius Miller, Testimony, 17: 617.

⁹² Leading references for testimony relating to competition are:

(1) 14: 697, 728, 736, 908, 910-913, 969.

(2) 16: 25-40, 49, 166-178, 244, 411, 431-433.

(3) 17: 506, 522, 529, 533, 547, 583, 596, 605, 607, 611, 616-644, 676-680, 695, 710-742.

(4) 23: 10-13.

(5) 24: 17, 51, 56, 57, 68-75.

⁹³ It should be recalled that this was written before the court decisions, as stated in the Preface.

There is, perhaps, no fact connected with the history of the Northern Securities Company which is so vulnerable as the search for an old territorial charter which would be beyond the power of legislative amendment and not subject to general laws and constitutional provisions adopted since the granting of such charter.⁹⁴ To a layman who is incapable of inventing one complex set of legal technicalities to offset another set of technicalities, the mere attempt to organize a great corporation of the present on the basis of an ancient charter, granted at a time when present conditions could not have been foreseen and when corporate magnitudes of the

⁹⁴ A different view is expressed by Mr. M. D. Grover, General Counsel for the Great Northern Railway company, in the following statement:

"Mr. Clough testified as follows:

"It was thought desirable if a company was formed that it should have the stability that a charter beyond the power of legislative amendment would give, and such a charter should be acquired for it if possible. It was known that the territory of Minnesota before the admission of the territory into the Union had granted a great many charters for financial and other companies, and it was thought possible that some of those old charters could yet be found that would contain the powers that would be considered necessary for the purpose and that would at the same time be legislative contracts with the state of Minnesota so that they would be beyond the power of amendment."

"In this there was nothing objectionable or subject to criticism. An investment company was to be organized with a large capital for the purpose of holding shares it might purchase representing a very large investment and being valuable through securing a permanent business condition and relation. Permanency of conditions attending the obtaining of traffic and the building up of a large business is essential.

"Corporations have only such power as the states in which they are organized give them. Unless there is a provision in the charter to the contrary, all charters are subject to alteration and amendment, even to the extent of impairing invested rights. Charters are a contract between the state and the incorporators. If a charter is accepted subject to the right of the state to alter or amend it at any time the incorporators or stockholders cannot object because they have accepted it and assumed all the burdens and risk incident to the exercise of the power. A charter giving rights to engage in business requiring large capital and very large credit, is much more valuable where all vested rights are secured against alteration by repeal or amendment than charters subject at all times to legislative will and to the vicissitudes of politics.

"The paper in question correctly sets forth the reasons for adopting the state of New Jersey and a charter under its laws. The laws respecting corporations and large business interests have been enforced, not in a spirit of distrust and with a view to limit or destroy corporate privileges, but with a view of recognizing the security of property and of corporate rights to hold and dispose of property. Much of the discussion concerning consolidations and unity of property in single control goes only to the point of the power of corporations engaged in business and to have a capital much larger than can be commanded by individuals in the exercise of their individual business right. Whether corporations ought to be organized with as large powers as some of them possess is a question to be discussed with a view of influencing a consideration of the matter by the legislatures of the several states. Since corporations have only such powers as the states where they are incorporated give them and cannot, except as respects carrying on interstate commerce, engage in business in states other than where incorporated, unless given permission by other states, there is little likelihood of injury to the public through the organization of corporations as have heretofore been formed."

year 1901 could not possibly have been imagined, is a deliberate effort to evade both the constitution and the law. There are hundreds of old charters still lying about this country. It may be technically legal in most states to utilize them for the purpose of re-organizing great corporations of today; but no amount of legality can suppress the conviction that such action would violate the spirit of existing law and that it would be contrary to public policy and out of harmony with the spirit of the times. In Massachusetts, for instance, nearly all the railways operate under early private charters, but they have accepted the general laws enacted since, although the plea of an inviolable contract could easily be maintained against such acceptance.⁹⁵ Hence we are not surprised to have the attorney-general of Minnesota sarcastically refer to the search for a "place of incubation."⁹⁶ The feelings which this search have aroused are fully justified. Had an acceptable territorial charter been found with powers prohibited by subsequent enactments, the state of Minnesota would apparently have stood in conflict with itself—a tantalizing comment on our legislative methods and history. A New Jersey charter, argued the attorney-general, cannot be secured for the express purpose of violating the laws of another state; furthermore, the laws of New Jersey provide that corporations may be formed thereunder "for any lawful purpose."⁹⁷ If the purpose of such a charter is in contravention of the laws of the state in which the corporation does business, it becomes of no effect, even under the laws of New Jersey.

Other points brought forward by the state, especially those based upon the anti-trust law, will be discussed, as was suggested above, in connection with the federal case. The defense, being generally alike for both cases, will be presented in its entirety in the same connection.

⁹⁵ The writer pointed out what he considered an illegitimate use of old railway charters in 1899, in a paper before the *American Economic Association*. See *Proceedings of Twelfth Annual Meeting of American Economic Association*, p. 232.

⁹⁶ Brief, 10: 19.

⁹⁷ Brief, 10: 95.

CHAPTER V.

ACTION OF THE FEDERAL GOVERNMENT.

The first public, official cognisance taken of the Northern Securities Company under federal law was a resolution of the Interstate Commerce Commission, adopted at a general session of the Commission in the City of Washington, D. C., on December 20, 1901, which reads as follows:

“IN THE MATTER OF CONSOLIDATIONS AND COMBINATIONS OF CARRIERS SUBJECT TO THE ACT TO REGULATE COMMERCE, INCLUDING THE METHOD OF ASSOCIATION KNOWN AS THE ‘COMMUNITY OF INTEREST’ PLAN.

“Whereas the twelfth section of the act to regulate commerce provides that the commission ‘shall have authority to inquire into the management of the business of all common carriers subject to the provisions of this act, and shall keep itself informed as to the manner and method in which the same is conducted,’ and requires the commission ‘to execute and enforce the provisions of this act;’

“And whereas it appears to the commission that certain consolidations and combinations of carriers subject to the act, including the method of association known as the ‘community of interest’ plan, should be made the subject of investigation, to the end that the commission may be informed as to their formation, purposes, and modes of operation, together with their effects upon the movement of interstate commerce and the rates received therefor, and to the further end that it may be ascertained whether such consolidations, combinations, and methods of association are unlawful under the act or have the effect of violating any of its provisions:

“*Ordered*, That a proceeding of investigation and inquiry into and concerning the matters above recited be set for hear-

ing at the United States court rooms, Monadnock block, in the city of Chicago, Ill., on the 8th day of January, 1902, at 10 o'clock a. m., the further hearing to be continued at such times and places as may appear to be required."

The Commission subsequently published the volume numbered "24" in the list of references of this essay. The testimony and documents contained in the same were later incorporated in the Special Examiner's Transcripts and made a part of the testimony on the Northern Securities case.

The next action on the part of the federal government was taken by the president of the United States when he requested Attorney-General Knox to express his opinion as to the legality of the procedure involved in the formation of the Northern Securities Company. On February 19, 1902, the attorney-general authorized the following statement to be published:⁸⁸ "Some time ago the president requested an opinion as to the legality of this merger, and I have recently given him one to the effect that, in my judgment, it violates the provisions of the Sherman Act of 1890, whereupon he directed that suitable action should be taken to have the question judicially determined." Accordingly, on March 10, the United States commenced suit in the United States circuit court at St. Paul against the three companies—Northern Securities, Great Northern, and Northern Pacific. Testimony was taken during October, November and December in St. Paul and New York. The case was argued before a special trial court at St. Louis, beginning March 18, 1903. This tribunal was composed of the four circuit judges of the eighth circuit, pursuant to the provisions of an act of congress approved on February 11, 1903,⁸⁹ which requires such cases to be heard "before not less than three of the circuit judges" of the circuit where the suit is brought if the attorney-general files with the clerk of the court wherein the case is pending, a certificate that it is one of "general public importance." Such a certificate was filed, and in accordance with the mandate of the statute the case was "given precedence over others and in every way expedited."⁹⁰

⁸⁸ § 63.

⁸⁹ Public—No. 82

⁹⁰ Opinion and Decree, p. 2.

The federal case against the Northern Securities Company was brought to enjoin the violation of the "Act to protect trade and commerce against unlawful restraints and monopolies" of July 2, 1890, commonly known as the Sherman Anti-trust Act, and section 5 of the Interstate Commerce law. As was suggested above, the state case rested partly upon the same ground, because the Minnesota anti-trust law is identical with the federal law in so far as it forbids contracts, combinations or conspiracies in restraint of trade. "The record in the state case is in all material respects identical with the record in the government case. . . . The relief sought in that case and in the state case is the same, namely, an injunction restraining the Northern Securities Company from holding and voting the stock of the defendant railway companies, and the railway companies from permitting the Northern Securities Company to vote their stock. The question in the government case and in the state case is whether the purchase by the Northern Securities Company of the shares of the defendant railway companies was, by reason of the voting power of the shares unlawful as in restraint of trade or a consolidation of competing railway companies."³

The representatives of the federal government rested their arguments in part upon the decisions of the United States supreme court in the *Trans-Missouri* and *Joint Traffic* cases.⁴ They argued that *every* contract in restraint of trade, whether reasonable or unreasonable, was in violation of the law. "We cannot read the word 'unreasonable' into the act. Congress may put it there; we cannot. That is the province of congress, not of the court. The act says *all* restraint; it does not say all *unreasonable* restraint, but *all* restraint"⁵ "Every person who shall monopolize or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several states, or with foreign nations, shall be deemed guilty of a misdemeanor," says the law. It forbids "three different crimes":⁶ (1) monopolize; (2) attempt to monopolize; (3)

³ M. D. Grover, General Counsel, in private letter.

⁴ 166 U. S. 230 and 171, U. S. 505, respectively.

⁵ Watson, Argument, 25: 49.

⁶ Watson, Argument, 25: 16.

combine, or conspire—"to breathe together"—with any other person or persons to monopolize. The possession of an actual monopoly is not necessary. The mere tendency to control is sufficient to stamp a combination as an illegal monopoly.⁶ Nor is the active exercise of acquired monopolistic powers essential. The mere possession of such power is unlawful. More than that. The law forbids the obtaining of the power. "This breathing together to acquire the power" is in itself a conspiracy.⁷ Furthermore, it is not necessary to prove that the Northern Securities Company intended to violate the law. Having demonstrated that a violation of law has been incurred, the manner in which it has been violated is immaterial. "In this case, the defendants cannot excuse themselves by saying: We did not intend to gain this power to stifle or cripple competition. It was not our purpose. We intended in the formation of this Northern Securities Company to form a benevolent corporation in which some aged men wished to put their stock in these railroad companies merely to keep it there."⁸ "The benefit to the people of this merger may be all that its master spirit, Mr. James J. Hill, . . . claims it to be, . . . ; it may accomplish 'vaster purposes in the development of traffic'; but these arguments of beneficent influences should be addressed to congress and not to the courts."⁹ The powers of the Security Company are 'infinite in scope, perpetual in character, vested in the hands of a few', and may be exercised 'by methods secret even to stockholders.'¹⁰ It will be interesting to follow out the possibilities of such a corporation. The original idea of the holding corporation, as explained by noted financiers, is to enable the minority to rule the majority. Thus, if two constituent companies have a joint capital of \$100,000,000, it will take \$51,000,000 to control them; but if a holding corporation can be formed and can acquire \$51,000,000 of stock, then \$26,000,000 will dominate the holding corporation, which will in turn

⁶ Watson, Argument, 25: 16.

⁷ Watson, Argument, 25: 28.

⁸ Watson, 25: 34.

⁹ Beck, Argument, 2: 112-13.

¹⁰ Beck, Argument, 2: 57-8.

dominate the \$100,000,000 corporation. Thus the quarter will dominate the three-quarters. This idea, however, is modest as compared with the Northern Securities Company, for, not only does a majority of the Northern Securities Company, namely, \$201,000,000, control the Burlington, Northern Pacific, and Great Northern systems, and all subsidiary companies, whose aggregate capitalization, including funded debt, exceeds \$1,000,000,000, but the board of directors, whose holdings of Northern Securities may be comparatively insignificant, can, during the tenure of their office, appoint a committee with power to act and to use the seal of the corporation at pleasure. This committee may be only three in number, and a majority is determinative. Thus, in the last analysis, two men may control the unlimited powers of the holding company, which, in turn, controls the vast powers of the Burlington, Northern Pacific, and Great Northern companies, and all subsidiary companies."

At this point it appears feasible to present in a more positive form several of the arguments in the federal case made by the representatives of the Securities Company.¹¹ The basis of a number of the economic arguments is found in the first two chapters of this monograph, namely, that the formation of the Northern Securities Company was necessary for the protection of property, made valuable through years of effort, against hostile interests; that no restraint, but rather an extension of commerce was intended; that an increase in traffic and a consequent reduction in rates would be effected; in short, that the Securities Company arrangement would result in advantages alike to the public and to the railways. The Securities Company, it was argued, was the result of a movement on the part of the stockholders, as such, of the constituent companies, and rested ultimately upon the right of the individual to purchase property to the extent of his wealth. In other words, the Securities Company was simply one expression of the rights of private property. "It is not a violation of the Anti-Trust Act for an individual to purchase or take by gift, marriage or inheritance all the shares of competing interstate carriers. A combination among all the

¹¹ Documents, 4, 5, 6, 7, 8, 9, 11.

holders of the shares of competing interstate carriers to sell their shares to any single interest is not a criminal combination. It is an agreement for the sale of property to one who has a right to purchase it. The sale is not interstate commerce. By such sale the rate making power of the corporation issuing the stock sold is in no respect limited or qualified. A holder of a majority of shares of a corporation engaged in interstate trade, whether as merchant, manufacturer, or carrier, may lawfully purchase in executive sale all the shares of a competing carrier. One owning a majority of shares of an interstate carrier may marry the holder of a majority of shares of a competing interstate carrier, and if by operation of law the personal property of a wife becomes the property of her husband, such shares of the wife would become the property of her husband, and his holding of the shares is not forbidden by the Anti-Trust Act because of his power to vote the shares at an election of directors of the respective companies. The holders of a majority of shares of the Great Northern Railway Company might have entered into a partnership with the holders of a majority of the shares of the Northern Pacific Company, and all their shares of stock in each company might have been lawfully transferred to the partnership and held by it as a partnership asset."¹² In opposition to this the government contended that no man has the absolute right to use his property as he sees fit. Its enjoyment has always been subject to restrictions. The law is full of limitations of its use. The right of property is no more sacred than the right to follow a trade or profession. "And the fundamental principle upon which it is all based is that we all form part of a great social whole, and that every man owes a duty to the whole. The individual welfare must yield to the good of the community. *Salus populi suprema lex*."¹³ Applying this to the Securities Company, it was argued that every purchase of the stock of the two railway companies was a step in the illegal purpose to control the two roads. The first purchase may have been entirely innocuous, and the second and third also; but when all the pur-

¹² Grover, Brief, 7: 30-31; also Stetson and Wilcox, 4: 16.

¹³ Watson, Argument, 25: 89; also 77, 87, 97.

chases necessary for control had been made the crime was committed, and every purchase was therefore made an unlawful act.¹⁴ "If such a corporation as the Northern Securities Company, with like powers, is lawful today, with four hundred million dollars of capital stock, tomorrow it will be equally lawful with four billion dollars of capital stock. If, with four hundred million dollars it may buy the Northern Pacific and Great Northern, with four billion dollars it can buy the control of every other railroad in this country and become the absolute dictators as to the carriage of every pound of freight."¹⁵

In both the state and the government cases frequent references were made to the *Trans-Missouri* (166 U. S., 290), *Joint Traffic* (171 U. S., 505), and *Addyston Pipe* (175 U. S., 211) cases. The defendants maintained that these cases were not in point as respects the alleged combination to form the Northern Securities Company and transfer shares to it. In all these cases, it was argued, the corporations had agreed to do a specific thing—establish rates and prices—which in itself was unlawful. The Northern Securities Company is not an unlawful combination because it is a corporation organized to do a lawful act.¹⁶ Neither does the *Pearsall* case (161 U. S., 646) apply, because in that case the Great Northern Railway Company made a contract with the bond-holders of the old Northern Pacific Company.¹⁷ In the Securities case the constituent corporations have taken no action whatever. The result was attained solely through the action of the stockholders, "and it is settled by controlling authority that their rights and powers are entirely distinct from those of the corporation itself."¹⁸ According to this doctrine, the action of a corporation is something distinct from the action of the stockholders composing the same, although the result may be substantially the same. The government admitted the existence of such a legal fiction, "but that the statement is a mere

¹⁴ Watson, Argument, 25: 41.

¹⁵ Watson, Argument, 25: 97. On June 30, 1901, the outstanding railway capital was \$11,688,147,091.

¹⁶ Grover, Brief, 7: 35; Bunn, Brief, 6: 14-20; Young, Brief, 11: 109-136.

¹⁷ Stetson & Wilcox, Brief, 4: 5; Bunn, Argument, 8: 24.

¹⁸ Young, Brief, 11: 166.

fiction, existing only in idea, is well understood, and not controverted by any one who pretends to accurate knowledge on the subject. . . . All fictions of law have been introduced for the purpose of convenience and to subserve the ends of justice. . . . But when they are urged to an intent and purpose not within the reason and policy of the fiction, they have always been disregarded by the courts. . . . So that the idea that a corporation may be a separate entity, in the sense that it can act independently of the natural persons composing it, or abstain from acting, where it is their will it shall, has no foundation in reason or authority, is contrary to the fact, and to base an argument upon it, where the question is as to whether a certain act was the act of the corporation, or of its stockholders, cannot be decisive of the question, and is therefore illogical; for it may as likely lead to a false as to a true result."¹⁹

Historically, the most interesting argument for the defense related to the development of railway combinations and the evolution of the holding company. It was contended that the consolidation of competing lines had been a matter of common knowledge before the passage of the Act of July 2, 1890; and that, if congress had intended, under the Act, to prohibit similar combinations in the future, the law would have given direct and definite expression to such a prohibition. Hence, congress did not intend to forbid, and does not forbid, "the natural processes of unification which are brought about under modern methods of lease, consolidation, merger, community of interest, or ownership of stock."²⁰ Besides, the Northern Securities Company is "not a railroad company, never had anything to do with the operation of railroads. The question of the purchase of the stock of two competing railroads by a third party has never been before the supreme court of the United States."²¹ The last sentence has reference to the *Trans-Missouri* and *Joint Traffic* cases, in which, among other things, the court held that railways were included in the Act of 1890. The Northern Securities Company not being a railway company, it was argued, would not

¹⁹ Beck, *Argument*, 2: 90-91; Watson, *Brief*, 25: 42-5.

²⁰ Griggs, *Brief*, 5: 41; Young, *Brief*, 11: 175-201.

²¹ Young, *Testimony*, 14: 885.

come within the scope of the Sherman law. Again, the Securities Company was represented as not being a "contract" or "combination," but only an investment or holding company, which would also exclude it from the operation of the law of 1890. The government took exception to these statements, asserting that the difference between a railway company and the Securities Company, between a technical merger and a transfer to the holding company, was "the difference between tweedle-dum and tweedle-dee."²² "The whole transaction was nothing more than the exchange of pieces of paper for other pieces of paper, both being certificates of ownership; the buyers were the sellers and the sellers were the buyers, with this important difference, that the part owner of the property of the Northern Pacific Railway, or the Great Northern, found himself a part owner of the property of both. Had the two constituent companies formally consolidated, no different results would have been accomplished." The government objected to the introduction of Poor's Manual as irrelevant and immaterial,—an objection which was raised periodically by both sides with respect to nearly every part of the testimony. The government was unwilling "to have unloaded onto us the railroad history of the country from the beginning."²³ "Can a man charged with an offence when brought into court plead as a defense that others have been guilty of like acts?" It was, however, admitted on the part of the government that historical facts which enable the court to determine the conditions and circumstances congress had in mind when the Sherman Anti-trust law was passed, could consistently be introduced. Six hundred pages of historical material were introduced.²⁴ These facts of railway history stand out in strongest relief as a monument to the futility and inefficiency of anti-consolidation legislation and its administration in the United States. The railway system of the United States and legislation prohibiting consolidations of parallel or competing lines developed together,—but in opposite directions, independently of each other. The set of railway administrative inventors has always been a little

²² Beck, Argument, 2: 53.

²³ Richards, Solicitor, 14: 882.

²⁴ Printed in 15.

ahead of the competing set of legislative legal inventors. The following summary will illustrate this:²⁵

"As early as the year 1840 three railroad companies were incorporated in the states of Massachusetts, New Hampshire and Maine to build a line of interstate railway from Boston to Portland: the Eastern Railroad of Massachusetts, the Eastern Railroad in New Hampshire, and the Portland, Saco and Portsmouth Railroad Company. About that time the Boston and Maine Railroad Company was incorporated in Massachusetts to build a railroad from Boston to Maine. Long before the passage of the anti-trust act, the Boston and Maine had itself first leased those parallel and competing lines, and afterwards practically absorbed all of them. So, again, some years before the passage of the anti-trust act, the West Shore Railroad extended from Weehawken in New Jersey to Buffalo, with ferry connections to New York, and was a competing line with the New York Central. That line was leased by the New York Central, and its entire stock of ten million dollars was acquired by the New York Central and Hudson River Railroad Company; and that was a matter of common knowledge and known to congress when it passed the Sherman Anti-trust Act. In like manner, the Lake Shore & Michigan Southern road, extending from Buffalo to Chicago, formed with the New York Central and other roads, at Buffalo, a line of interstate railway between New York and Chicago. About the year 1881, a rival and competing line, the New York, Chicago & St Louis, known as the Nickel Plate Line, was projected and built between Buffalo and Chicago, having the same connections and opportunities for interstate traffic that the Lake Shore itself had, and was a rival and actually competing line; and the majority of the capital stock of that company was acquired as early as 1883 or 1884 by the Lake Shore and Michigan Southern Railway Company, thus making from New York to Chicago a series of parallel and competing lines, where the stock of one system, or a majority of it, was owned by the railroad which controlled the other system. In like manner the principal highways of interstate commerce between the cities of New York and Philadelphia were originally a parallel rail-

²⁵ Young, Testimony, 14: 876-884.

road and canal; the Camden and Amboy Railroad, and the Delaware and Raritan Canal, chartered by the state of New Jersey prior to the year 1840. Prior to 1871, those systems had become closely united in operation with the road of the New Jersey Railroad & Transportation Company from Jersey City to Trenton, and the road from Trenton to Philadelphia known as the Philadelphia and Trenton. In 1871 the Pennsylvania Railroad Company leased perpetually all of those parallel and competing lines, and has ever since operated them between New York and Philadelphia. Prior to the year 1870 the Pennsylvania Railroad Company had a substantially perpetual lease of the railroad from Pittsburg to Chicago, known as the Pittsburg, Fort Wayne & Chicago Railroad, and was built by that company. It also owned the entire stock of a railway leading from Pittsburg, known as the Pittsburg, Cincinnati & St. Louis, which among its other lines had a line from Pittsburg to a point known as Bradford Junction, in the state of Indiana, I think it was, where it connected with a line which itself leased, known as the Chicago, St. Louis & Pittsburg, or at least at some time known by that name, which extended from Bradford Junction to Chicago; and the entire stock of the Pittsburg, Cincinnati & St. Louis Road was owned by the Pennsylvania Railroad Company. In 1870 the Pennsylvania Railroad Company caused to be incorporated in the state of Pennsylvania a holding and operating company, known as the Pennsylvania Company, to which it transferred its leases and its holding of stock in the lines west of Pittsburg. At the time of the organization of the Pennsylvania Company and the transfer to it by the Pennsylvania Railroad Company of its leases and stock holdings west of Pittsburg, the Pennsylvania Railroad Company, in consideration of such transfer, acquired and has ever since held the entire capital stock of the holding and operating company,—the Pennsylvania Company.

"Now, all of those are matters which existed at the time of the passage of the Act of 1890. And since then the Boston & Maine Railroad has gone on with the same policy of leasing and acquiring stock of parallel and competing lines, including the Boston & Lowell, with its connections—the Concord & Montreal, the Northern Railroad of New Hampshire, the

Central Railroad of Vermont, the Connecticut & Passumpsic, the Fitchburg Railroad, with its lessor—the Vermont & Massachusetts, and other lines—the result of which is that the Boston & Maine has acquired at least four of what were originally parallel and competing lines between the cities of Boston and Montreal and Quebec, and also at least two parallel and competing lines between Boston and the West, and still holds and operates them. And in like manner, the New York and New Haven Railroad Company, originally chartered to build and which did build a road from New York to New Haven of ninety miles—and the only road which it ever built, afterwards became consolidated with the New Haven, Hartford and Springfield Railroad Company, under the name it has ever since borne, the New York, New Haven & Hartford Road; and it has by a series of similar leases, acquisitions of stock, or purchases outright from other railroad companies, acquired a series of competing lines between Boston and New York—all rail lines, and lines of rail and water transportation, so that in point of fact a person cannot go by anything like a direct road from Boston to New York without going over one or the other of the roads which were originally parallel and competing, but which have been acquired in one of the different ways before stated by the New York, New Haven & Hartford Railroad Company. Among other acquisitions of the New York, New Haven & Hartford, they acquired a majority of or substantially all the stock of the New York and New England road—a parallel line which controlled one line of transportation on Long Island Sound (that from Norwich to New York); and by their acquisition of the Old Colony Railroad, through substantially a perpetual lease, and the ownership of a very large portion of its stock, secured a controlling interest in the Old Colony Steamship Company, and also the stock of the steamers running from Providence and Stonington to New York.

“Now, coming to the state of New York, we find that the New York Central and Hudson River road has also acquired the Rome, Watertown & Ogdensburg road by substantially a perpetual lease—which with its connections had been a direct competitor and rival of that company. And within a very few years the New York Central Company has acquired

ninety-five per cent of the stock of the Lake Shore & Michigan Southern Company, and substantially the same amount of the stock of the Michigan Central Railroad Company, which, with its lessor company, the Canada Southern Company, operates a line from Buffalo to Chicago, being naturally and originally a competing line both with the Lake Shore & Michigan Southern and the Nickel Plate. So we have from New York City to Chicago, the New York Central controlling by stock ownership this series of roads which were its natural competitors.

"And so in the case of the Pennsylvania Railroad. Within a very short time, I think in the year 1899 or 1900, it acquired a controlling interest in the Baltimore & Ohio. The Pennsylvania road for many years had owned substantially all the stock of the Philadelphia, Wilmington & Baltimore Railroad Company, whose line extended from Philadelphia to Baltimore; and of the Baltimore and Potomac Railroad Company, whose line extended from Baltimore to Washington; and it operated these lines, and these lines from New York and Philadelphia made a through line from New York to Washington. The Baltimore & Ohio Railroad Company has owned a line for many years from Baltimore to Washington, and has operated other railroads for some years past, making a through line from New York to Washington and beyond Washington. And in the west and southwest the Baltimore & Ohio Railroad Company has had a line which touches all the principal points reached by the Pennsylvania Railroad, and competes with the Pennsylvania at Pittsburg, Cleveland, Sandusky, Wheeling, Chicago, Louisville and St. Louis, to say nothing of other points. The Chesapeake & Ohio Railroad Company has also been very much in the same position in regard to the Pennsylvania Railroad as the Baltimore & Ohio has been. The same is true to some extent of the Norfolk & Western Railroad. And within the last three years, I think it is, the Pennsylvania Railroad Company has acquired, if not a majority, at least very near that amount of the capital stock of each one of these railroads operating parallel and competing lines. So today no official of the government can go in or out of the city of Washington without riding over a railroad which is operated and controlled by some other railroad company

also having parallel and competing lines going to the same place. That is true today and has been for some years.

"Now, we say that many of these matters have been necessarily well known, during all this period, to all the officers of the government, both before and since the passage of the Anti-trust Act. And they were done under the authority of state legislation which is plainly unconstitutional if these acts are restraints upon interstate commerce. Consequently we say that all of these matters are to be taken into consideration in determining, first, what congress intended by the passage of the act; and secondly, what the universal construction of the act has been since that time."

From the point of view of history, the Northern Securities Company is the logical culmination of a long series of events as old as the railway itself, in which the inherent tendencies toward combination have been in perpetual conflict with laws assuming natural competition. In this conflict the forms of co-operative effort and combination have been metamorphosed into new shapes to avoid the ban which the law had placed upon the old. These new forms have generally been slightly in advance of the law.

The lines of attack pursued by the government are indicated in the following series of propositions which, the assistant attorney general stated, had been derived from applicable decisions of the federal appellate courts, and which he applied to the facts of the merger under consideration:

1. Public policy requires free competition between competing transportation lines and forbids all attempts to restrict such competition or create a monopoly.
2. The police power extends to corporations which are engaged in a public service, and which are, therefore, subject to legislative control so far as becomes necessary for the protection of the public interests, and it is competent for the legislature of a state with respect to domestic trade, and congress with respect to interstate trade, to prohibit either corporations or individuals from combining, either directly or indirectly, so as to eliminate competition.
3. The purchase of stock by a railroad corporation in a competing line is contrary to public policy and void, and this

even though accomplished by individual stockholders, acting in behalf and for the interests of the purchasing company.

4. Where the direct and necessary result of a given combination is to eliminate competition, and thereby restrain trade, the intent to accomplish that result will be presumed and need not be formally proved.

5. It is not important that the proposed combination does not secure a complete monopoly of a given subject of commerce; a partial monopoly is equally offensive to public policy.

6. The fact that the power of the combination has not been exercised to increase prices or rates is not important. The law is concerned not with what is done, but with the power to do.

7. The law will look to the substance and not to the form, and will not permit a monopolistic combination, no matter by what corporate or legal devices it may be attempted.

8. Corporations as personalities only exist in a fiction of the law and for practical and beneficial purposes which subserve public interests. Where such fiction is evoked to violate criminal statutes or to defeat sound public policy, such fiction will be disregarded and the law will look to the acts of the individuals who control the corporation as the acts of the corporation itself.

9. Therefore, the mere fact that such a consolidation takes the form of a purchase by the stockholders of one company individually of a portion of the capital stock of a competing line will not legalize the transaction, and this notwithstanding the fact that the capital stock so purchased is less than a majority, provided it be purchased with a view to the control of the competing line.

10. The liberty guaranteed by the fifth amendment to purchase and sell property is clearly subject to the police power of the state, and does not sanction purchases and sales of capital stock with a view to a practical consolidation of parallel and competing lines.

CHAPTER VI.

DECISIONS OF THE FEDERAL TRIAL COURT AND
OF THE UNITED STATES CIRCUIT COURT.

Two different decisions were rendered in this case by circuit judges of the United States before it reached the supreme court for the first time. The one by four judges,²⁶ referred to above, sitting as a trial court, under a special act of congress; the other by the regular circuit court.²⁷ The former decided the case brought by the federal government, and the latter that brought by the state of Minnesota.

The decision of the trial court, written by Judge Thayer and concurred in by the other three, recites very briefly the facts derived "from admissions made by the pleadings as well as from much oral testimony." Subsequent to the acquisition of the Burlington, recites the court, certain influential stockholders of the Great Northern and Northern Pacific, "acting in concert with each other," placed the great majority of the stock of the two constituent companies in the hands of a single person, the Securities Company. This destroyed every motive for competition between natural competitors. Since every person "is presumed to intend what is the necessary consequence of his own acts, when done willfully and deliberately, we must conclude that those who conceived and executed" this plan intended to restrain commerce and acquire the power of establishing unreasonable rates. The fact that unreasonable rates have not yet been established is no guarantee against extortion in the future, for the power to extort exists in the hands of the Security Company. This is prohibited by the Anti-trust act, which declares illegal every combination in the

²⁶ Circuit Judges; Caldwell, Sanborn, Thayer, Van Devanter.

²⁷ Circuit Judge; Loehren.

form of a trust or *otherwise*. The generality of the language of the act indicates the desire of congress to prohibit every scheme which might be devised to restrain trade, whether known at the time of enactment or whether still to be invented. The Securities Company accomplishes the object which congress has declared illegal perhaps more effectually than other forms of combination generally known in 1890 when the Anti-trust law was passed. Nor would the prohibition of an arrangement like the Securities Company constitute an undue, perhaps unconstitutional, restriction of the right of private property and of private contracts, for congress has the power, under the constitution, to prevent a citizen from entering "into those private contracts which directly and substantially, or indirectly, remotely, incidentally and collaterally" restrain commerce among the states. Referring to the contention of the defendants that since the Securities Company had been fully organized and the majority of the stock of the two railways acquired before the bill of the government was filed no relief could be granted to the government, the court held that "it would be a novel, not to say absurd, interpretation of the Anti-trust act to hold that after an unlawful combination is formed and has acquired the power which it had no right to acquire . . . and is proceeding to use it and execute the purpose for which the combination was formed, it must be left in possession of the power that it has acquired, with full freedom to exercise it." One of the objects for which the Securities Company was formed was the promotion of commerce. Upon this point the court expressed itself as follows:

"It may be that such a virtual consolidation of parallel and competing lines of railroad as has been effected, taking a broad view of the situation, is beneficial to the public rather than harmful.

"It may be that the motives which inspired the combination by which this end was accomplished were wholly laudable and unselfish; that the combination was formed by the individual defendants to protect great interests which had been committed to their charge; or that the combination was the initial and the necessary step in the accomplishment of great designs, which, if carried out as they were conceived, would prove to

be of inestimable value to the communities which these roads serve and to the country at large.

"We shall neither affirm nor deny either of these propositions, because they present issues which we are not called upon to determine, and some of them involve questions which are not within the province of any court to decide, involving, as they do, questions of public policy which congress must determine.

"It is our duty to ascertain whether the proof discloses a combination in direct restraint of interstate commerce,—that is to say, a combination whereby the power has been acquired to suppress competition between two or more competing and parallel lines of railroad engaged in interstate commerce.

"If it does disclose such a combination, and we have little hesitation in answering this question in the affirmative, then the anti-trust act, as it has been heretofore interpreted by the court of last resort, has been violated and the government is entitled to a decree."

In accordance with these conclusions the court declared the acquisition of the stock by the Securities Company, illegal; it enjoined the Securities Company from acquiring additional stock, from voting the stock already acquired, and from paying dividends on its stock or exercising any control whatsoever over the corporate acts of the Great Northern and Northern Pacific Railway Companies. Permission to return to shareholders the stock not held was expressly granted. So much of the decree of this court as restrains the two railway companies from paying over to the Securities Company dividends upon shares owned by it was subsequently suspended by the court during the appeal of the case to the supreme court on condition that the litigation would be prosecuted with due diligence.

The difference between the opinion of the trial court in the federal case just described and the opinion of the United States Circuit Court in the state case are clearly fore-shadowed in the statement of facts in the latter opinion. Judge Lochren states briefly the facts of organization of the Great Northern and Northern Pacific railway companies; he refers to the interests of the state of Minnesota as a land owner, shipper, and pur-

chaser of supplies; he summarizes the legal facts of the state anti-consolidation and anti-trust acts; he presents the substance of Hill's testimony in regard to the importance of back-loading and the economic and strategic value of the Burlington; he passes in brief review the conflict in the stock market between the Union Pacific and the Northern Pacific interests, which culminated in the formation of a holding company, with which neither the Great Northern Company nor the Northern Pacific Company had anything to do; and finally, he accepts "as the purpose and intent" on the part of the promoters of the Securities Company their desire to secure the Northern Pacific Company against the danger of any future raid upon its stock which might place its management and the resulting control of the Burlington system in the power of any rival railroad corporation whose interests might be hostile to the development of the property of the Northern Pacific and Great Northern companies and their seaboard terminals, and of the region of country traversed by their railroad systems. It is his opinion that "the evidence fails to show that the Securities Company was formed for the purpose of acquiring and holding a majority of the stock of the Great Northern Company as well as that of the Northern Pacific Company, although that result followed soon after, and may have been desired and anticipated." The Trans-Missouri, Joint Traffic Addyston Pipe, Pearsall and other leading cases, considered also by the trial court and figuring greatly in all the briefs, lead Judge Lochren to deduce the general proposition "that contracts which do not directly and necessarily affect transportation or rates therefor, are not in restraint of trade or within the statute (State Anti-trust Act), even though they may remotely and indirectly appear to have some probable effect in that direction." The Securities Company, unlike the Trans-Missouri Freight Association and analogous organizations, is merely an investor in and owner of shares of railway stock. It is not a railway company. Its franchise confers no power to manage railways with respect to rates. "There is no scintilla of evidence that it has sought to control or interfere in respect to any of these matters." In short, the formation of the Securities Company involved no act or contract in restraint of trade

or commerce or affecting transportation rates, more than any ordinary transfer of railroad stock from one person to another. "The formation of the Northern Securities Company and its holdings of stock has and can have nothing to do directly or indirectly with trade, commerce, transportation or rates." It is regarded unjust to presume that the Great Northern and Northern Pacific companies will contract illegally with each other for the control of rates and in restraint of trade; if so, they will "for the first time" violate the anti-trust act of Minnesota, and the corporations and their offending officials will be amenable to punishment, and to appropriate legal or equitable proceedings." The decision rejects the doctrine that the mere possession of power warrants an assumption of the criminal use of such power.

The vital point of difference in the two opinions is admirably summarized in a private letter,²⁸ a part of which is here inserted:

"The state case and the government case are identical as respects the construction to be given to the 'Sherman Anti-trust Act.' The circuit judges decided that the purchase of a majority of shares by a single interest was criminal because of the voting power of the shares and the necessary inference that the power would be exercised to restrain competition. Judge Lochren holds directly the reverse.

"Let me give you an illustration to make the point of difference clear: A ferry company, organized in Minnesota with a capital of \$100,000.00, is operating a ferry-boat between Duluth, in Minnesota, and Superior, in Wisconsin. A Wisconsin company with the same capital is operating a competing ferry-boat between the same points. A person or corporation purchases a majority of the shares of each company. The circuit judges decided that such a purchase, being in direct restraint of competition, is criminal. Judge Lochren holds the reverse."

The following parallel readings will afford additional comparisons between the two decisions:

²⁸ M. D. Grover, General Counsel for the Great Northern Ry. Co.

OPINION OF TRIAL COURT.

(1) According to the familiar rule that every one is presumed to intend what is the necessary consequence of his own acts, when done willfully and deliberately, we must conclude that those who conceived and executed the plan aforesaid intended, among other things, to accomplish these objects.

(2) To this end, these stockholders arranged and agreed with each other to procure and cause the formation of a corporation under the laws of the State of New Jersey, which latter company, when organized, should buy all or at least the greater part of the stock of the Northern Pacific and Great Northern Companies.

(3) It confers the power to establish unreasonable rates and directly restrains commerce by placing obstacles in the way of free and unrestricted competition between carriers who are natural rivals for patronage.

(4) Competition, we think, would not be more effectually restrained than it now is under and by force of the existing arrangement, if the two railroad companies were con-

OPINION OF CIRCUIT COURT.

(1) I am compelled to reject the doctrine that any person can be held to have committed, or to be purposing and about to commit a highly penal offense, merely because it can be shown that his pecuniary interests will be thereby advanced, and that he has the power, either directly by himself, or indirectly through persuasion or coercion of his agents, to compass the commission of the offense.

(2) The evidence therefore fails to show that the Northern Securities Company was formed for the purpose of acquiring and holding a majority of the stock of the Great Northern Company as well as that of the Northern Pacific Company.

(3) It is not a railroad company and has no franchise or power to manage or operate or direct the management or operation of either railroad in respect to rates or charges for transportation, or otherwise.

(4) The decision of the case last cited, (i. e. Trial Court) as I read it and understand it, does not specify or point out any contract,

solidated under a single charter.

(5) It is almost too plain for argument that the defendants would have violated the Anti-trust Act if they had done, through the agency of natural persons, what they have accomplished through an artificial person of their own creation. . . .

What has been done through the organization of the Securities Company accomplishes the object, which congress has denounced as illegal, more effectually, perhaps, than such a combination as is last supposed. . . .

It will not do to say that so long as each railroad company has its own board of directors they operate independently and are not controlled by the owner of the majority of their stock. It is the common experience of mankind that the acts of corporations are dictated and that their policy is controlled by those who own the majority of their stock.

agreement or act on the part of the defendants, or of any of them, which is directly in restraint of trade or commerce, or which has any direct reference to trade, commerce, transportation or rates; nor even any threat or avowed purpose on the part of any defendant to do any such act, or enter into any such contract or agreement.

(5) The case is far from sustaining the idea that if a single investor in railroad stocks, whether a natural person or a corporation without railroad franchises, should acquire, by purchase, a majority or the whole of the stock of both the Northern Pacific Company and the Great Northern Company, that would work any consolidation of those two companies, or that such purchaser would have any power to manage or operate the railroads of both or either of said railroad companies.

CHAPTER VII.

FIRST DECISION OF THE UNITED STATES SUPREME COURT.

In addition to the decision of the majority of the court, two dissenting and one concurring opinion must be considered. The majority decision, which was written by Justice Harlan, opens with the text of the Sherman Anti-Trust Law of 1890, followed by a consideration of the questions whether or not a combination or conspiracy in restraint of trade or commerce among the states or with foreign states has been shown by the pleadings and the evidence, and whether or not the case is one in which the defendants may be properly chargeable with monopolizing or attempting to monopolize any part of such trade or commerce. The court then recites briefly the facts leading up to the organization of the Northern Securities Company, endorsing in this connection²⁹ that part of the decision of the trial court which characterized the Northern Securities arrangement as one by which the control of the Great Northern and Northern Pacific Railways was vested in a "common body, to wit the holding corporation, with not only the power but the duty to pursue a policy which would promote the interests" of both systems of railways at the expense of the public and removing all inducements for competition between them. Within the meaning of the Anti-Trust Act this arrangement is characterized as a combination in restraint of interstate and international commerce, which alone is sufficient to bring it under the condemnation of the law.³⁰ The court holds that if the Anti-Trust Act does not

²⁹ Decision (193 U. S. 197) : 2-4. The paging adopted in this monograph is the paging of the edition of the decisions issued by the Department of Justice.

³⁰ Ibid : 11.

embrace the Northern Securities arrangement, the plain intention of the legislative branch of the government will be defeated. "If congress has not, by the words used in the Act, described this and like cases, it would, we apprehend, be impossible to find words that would describe them."³¹ The court recognizes as valid the charges of the government that if the combination was held to be not in violation of the act of congress, "then the efforts of the national government to preserve to the people the benefits of free competition among carriers engaged in interstate commerce will be wholly unavailing, and all transcontinental lines, indeed the entire railway systems of the country, may be absorbed, merged and consolidated, thus placing the public at the absolute mercy of the holding corporation."³² The holding corporation would cause all constituent companies to cease actively to compete for trade and commerce along their respective lines, and make them one powerful consolidated corporation. Stock-holders of the holding company are interested primarily in preventing all competition between the constituent lines, and as owners of stock or of certificates of stock in the holding company, they will see to it that no competition is tolerated.³³ Whether the free operation of the normal laws of competition is a wise and wholesome rule for trade and commerce is an economic question which the court is not called upon to consider or to determine.³⁴ Congress has the power under the constitution to establish rules by which interstate and international commerce shall be governed. It has prescribed as one such rule the rule of free competition among those engaged in such commerce, and the "natural effect of competition is to increase commerce." Any constitutional guarantee of the liberty of contract does not prevent congress from prescribing the rule of free competition for those engaged in interstate and international commerce.³⁵ Earlier decisions of the court have held that liberty of contract does not involve the right to deprive the public of the advantages of free competition in trade

³¹ U. S. S. C. (193 U. S. 197) : 31.

³² Ibid : 6.

³³ Ibid : 7.

³⁴ Ibid : 15.

³⁵ Ibid : 11.

and commerce. Liberty of contract does not imply liberty in a corporation or individuals to defy the national will when legally expressed. Nor does the enforcement of the legal enactment of congress infringe in any proper sense the general inherent right of every one to acquire and hold property. That right, like all other rights, must be exercised in subordination to the law.³⁶ It will be recalled that the argument with respect to the free exercise of the rights of property was strongly emphasized before the trial court, and in substance it was repeated before the supreme court. "I do not deny the very spirited contention that the construction we put upon the law in question interferes with the power of people to do what they will with their property. That was the very object of the law, and it was certainly contemplated that the rights of purchase, sale and contract would be controlled so far as necessary to prevent these rights from being exercised to defeat the law."³⁷ Many students of economics will probably ask the question, why this particular point did not receive more attention at the hands of the court. The court expressed the opinion that if the certificate of incorporation of the Securities Company had expressly stated that the object of the company was to destroy competition between competing parallel lines of interstate carriers, all would have seen at the outset that the scheme was in hostility to the national government, and that there was a purpose to violate or evade the act of congress. It is also asserted that nothing in the record tends to show that the state of New Jersey had any reason to suspect that those who took advantage of its liberal incorporation laws had in view, when organizing the Securities Company, the destruction of competition between two great railway carriers engaged in interstate commerce in distant states of the union.³⁸ With reference to the argument that railway corporations created under the laws of the state can only be consolidated with the authority of the state, the court holds that even if the state allowed consolidations, it would not follow that the stockholders of two or more state railway corpora-

³⁶ U. S. S. C. (193 U. S. 197) : 25.

³⁷ Oral argument of the Attorney General of The United States, 29: 69.

³⁸ U. S. S. C. (193 U. S. 197) : 20.

tions, having competing lines and engaged in interstate commerce, could lawfully combine to form a distinct corporation to hold the stock of the constituent corporations, and by destroying competition between them, in violation of the act of congress, restrain commerce among the states and with foreign nations.³⁹ Generally speaking, the supreme court follows the main lines of thought represented by the decision of the trial court and expressly states that the "circuit court has done only what the actual situation demanded." The decree, if executed, will destroy, not the property interests of the original stockholders of the constituent companies, but the power of the holding corporation as the instrument of the illegal combination. In affirming the judgment of the court below, and giving permission to this court to proceed in the execution of its decree, as the circumstances may require, the United States supreme court put an end to that type of holding corporations which is created with the distinct purpose of acquiring and holding shares of stock of parallel and competing lines.

The concurring opinion of Justice Brewer is in some respects the most noteworthy feature of the decision, because Justice Brewer indicates a way out of the difficulties into which the construction placed upon the Anti-Trust law by the court will inevitably lead. He cannot assent to all that is stated in the opinion of the court. In some respects the reasons given for the judgments in the *Trans-Missouri*, *Joint Traffic*, and similar cases referred to by him, cannot be sustained. Instead of holding that the Anti-Trust Act includes all contracts, reasonable or unreasonable, in restraint of interstate trade, Justice Brewer holds that the ruling should have been that the contracts presented in the *Joint Traffic* and similar cases were unreasonable restraints of interstate trade, and as such they fell within the scope of the law. The Anti-Trust Act was leveled only at unlawful restraints and monopolies. Congress did not intend to reach and destroy those minor contracts in partial restraint of trade which that long course of decisions in common law had affirmed were reasonable and ought to be upheld. Most economists will welcome this dis-

³⁹ U. S. S. C. (193 U. S. 197): 15.

inction between reasonable and unreasonable restraints of trade, but it may not be obvious to all how this position, although accurate in their estimation, can be reconciled with an earlier statement in Justice Brewer's opinion, that the Trans-Missouri and Joint Traffic "cases were rightly decided."⁴⁰ Another important point in Justice Brewer's decision relates to the right of the individual to manage his own property and determine the place and manner of its investment. Freedom of action in these respects is among the inalienable rights of every citizen. In applying this law to the present case, it appeared that Mr. Hill was the owner of the majority of the stock in the Great Northern Railway Company, and he could not by any act of Congress be deprived of the right of investing his surplus means in the purchase of stock of the Northern Pacific Railway Company, although such purchase might tend to vest in him, through that ownership, a control over both companies. In other words, the right which all other citizens had of purchasing Northern Pacific stock could not be denied to him by congress because of his ownership of stock in the Great Northern Company.⁴¹ A corporation is not endowed with the inalienable rights of a natural person. The Securities Company was a mere instrumentality by which separate railway properties were combined under one control. A holding corporation of this type would make it possible, by means of a series of progressive consolidations, to vest the control of all the railway properties of the United States in single hands. Justice Brewer does not enlarge upon the alleged beneficence of free and unrestricted competition among railways. He recognizes that a single railway is, if not a legal, largely a practical monopoly, and that a holding company may extend and broaden such monopoly. In conclusion, Justice Brewer says that he felt constrained to make these observations for fear that the broad and sweeping language of the opinion of the court might tend to unsettle legitimate business enterprises, stifle or retard wholesome business activity and encourage improper disregard of reasonable contract, and invite unnecessary litigation.

⁴⁰ Ibid : 33.

⁴¹ Ibid : 34.

The dissenting opinion, written by Justice White and concurred in by the Chief Justice and Justices Peckham and Holmes, is devoted chiefly to the consideration of two questions: First, does the Anti-Trust Act, when rightly interpreted, apply to the acquisition and ownership by the Northern Securities Company of the stock in the two railroads; and second, if it does, had congress the power to regulate or control such acquisition and ownership? At the root of the case lies the question of power, and the case for the government depends upon the proposition that the ownership of stock in railway corporations created by a state is interstate commerce wherever the railway is engaged in interstate commerce.⁴² It should be noted, too, that this opinion concedes at the outset that the Northern Pacific and the Great Northern are "in some aspects" competing railways. Obviously an answer to the question whether or not the acquisition and ownership of the railway shares in question is interstate commerce depends upon the accepted definition of interstate commerce. Such a definition, and one which has been accepted many times by the court, is found in *Gibbons vs. Ogden* and reads as follows: "Commerce undoubtedly is traffic, but it is something more, it is intercourse; it describes the commercial intercourse between nations and parts of nations in all its branches, and is regulated by prescribing rules for carrying on that intercourse."⁴³ If the commerce clause of the constitution authorizes congress to regulate the ownership of the stock in railways chartered by state authority, the tenth amendment will have been destroyed and practically no powers left to the states exclusively, in case it can be shown that any of these powers have reference to the ownership of property which in the most indirect manner can be associated with interstate commerce. It would give congress the right to abrogate every railway charter granted by the states, if congress deemed that the rights conferred by such state charters tended to restrain commerce between the states or to create a monopoly concerning such commerce. It would give congress the power to dissolve consolidations expressly authorized by the laws

⁴² U. S. S. C. (193 U. S. 197): 39.

⁴³ *Ibid.*: 40.

of the several states or to permit consolidations expressly prohibited by state laws. The principle that the ownership of property is embraced within the power of congress to regulate commerce violates the most elementary conceptions of the rights of property; for it would follow that if congress considered the acquisition by one or more individuals engaged in interstate commerce of more than a certain amount of property would be prejudicial to interstate commerce, the amount of property held or the amount which could be employed in interstate commerce could be regulated.⁴⁴ Justice White states that his mind fails to seize the distinction that the right of the Securities Company to hold this stock is one thing and the power of individuals or corporations when not organized for the purpose of holding this stock is an entirely different thing. Similar ownership of the same property by one or more individuals is involved, and the same alleged restraint or monopoly and prohibition of this holding under the law must be a necessary consequence. The suggested distinction is to him an incongruity which would do violence to both the letter and the spirit of the constitution, since it would in effect hold that although a particular act was a burden upon interstate commerce or a monopoly thereof, individuals could lawfully do the act, provided only that they did not use the instrumentality of a holding corporation.⁴⁵ The decree of the lower court, while it forbids the use of the stock of the Northern Securities Company, authorizes its return to the alleged conspirators and does not restrain them from exercising the control resulting from the ownership. "If the conspiracy and combination existed and was illegal, my mind fails to perceive why it should be left to produce its full force and effect in the hands of individuals by whom it was charged the conspiracy was entered into."⁴⁶ Reference is made to the consolidations represented by the Boston & Maine, New York, New Haven and Hartford, New York Central, the Pennsylvania, and other railway systems, and the conclusion is drawn that since congress had full knowledge of these facts at the time of the

⁴⁴ *Ibid*: 42.

⁴⁵ *Ibid*: 43.

⁴⁶ *Ibid*: 43.

enactment of the Anti-Trust Law in 1890, it must have been universally understood by members of congress that the authority to regulate these organizations lay with the states, and that the states and not congress had control of the subject-matter of the organization and ownership of railways created by the states.⁴⁷ The Northern Securities is the first case in which this power of congress has been asserted. Justice White refers to the Joint Traffic and Trans-Missouri cases, not because they are apposite to the Northern Securities case, "for they are not, since the contracts which were involved in them vitally concerned interstate commerce, while in this case the sole question is whether the ownership of stock in competing railroads itself involved interstate commerce." He refers to these cases because they illustrate the distinction which the supreme court has always maintained between the power of congress over interstate commerce and its want of authority to regulate subjects not embraced within that grant.⁴⁸ A number of other cases are similarly referred to for the purpose of showing that in the light of these decisions the ownership of stock of competing railways is not interstate commerce. Referring to the contention that the power of congress over interstate commerce includes the authority to regulate the instruments of such commerce, Judge White holds that the power to regulate instrumentalities is entirely distinct from the power to regulate the acquisition and ownership of such instrumentalities.⁴⁹ A position very similar to that assumed by Judge Lochren is maintained in the present opinion when it is asserted that "to maintain the contention, therefore, it must be decided that because ownership of property if acquired may be so used as to burden commerce, therefore to acquire and own is a burden."⁵⁰ In other words, Justice White believes that the majority opinion confuses the two ideas of the ownership and the use of property, and holds that the right of the government to control the use of property affords no foundation for the proposition that there exists in government a power to limit the quantity and character of

⁴⁷ U. S. S. C. (193 U. S. 197) : 45.

⁴⁸ *Ibid* : 53.

⁴⁹ *Ibid* : 57.

⁵⁰ *Ibid* : 59.

property which may be acquired and owned. The difference between the two is the difference between a free and constitutional government restrained by law and an absolute government unrestrained by any of the principles which are necessary in the perpetuation of society and the protection of life, liberty and property.

Great cases, like hard cases, make bad law, says Justice Holmes in his individual opinion; for great cases are called great not by reason of their real importance in shaping the law of the future, but because of some accident of immediate overwhelming interest which appeals to the feelings and distorts the judgment.⁵¹ It is by no means difficult to receive the suggestion of the influence of immediate overwhelming interest in shaping the views of the majority of the court. Justice Holmes holds that the Anti-Trust Act is a criminal statute, and that it is vain to insist that this is not a criminal proceeding. "The words cannot be read one way in a suit which is to end in fine and in imprisonment and in another way in one which seeks an injunction." In consideration of the position assumed in the majority opinion, he holds that whatever is criminal when done by way of combination is equally criminal if done by a single man. The position of the government depends upon the effect which the purchase of the shares of stock may have upon the competitive relations of the two railways. "If such a remote result of the exercise to an ordinary extent of property and personal freedom is enough to make the exercise unlawful, there is hardly any transaction concerning commerce between the states that may not be made a crime by the finding of jury or court. The personal ascendancy of one man may be such that it will give to his advice the effect of a command, if he own but a single share in each road. The tendency of his presence in the stockholders' meeting may be certain to prevent competition, and thus his advice, if not his mere existence, become a crime."⁵² We may add to this the words of Justice White to the effect that "the doctrine must in reason lead to the concession of the right in congress to regulate concerning the

⁵¹ Ibid: 63.

⁵² Ibid: 65

aptitude, the character, and the capacity of persons.”⁵³ The Anti-Trust law hits two classes of cases, and only two: contracts in restraint of trade and combinations or conspiracies in restraint of trade,⁵⁴ and the existence of neither of these has been proved by the evidence and pleadings. In his opinion there is no attempt to monopolize and no combination in restraint of trade until something is done with the intent to exclude strangers to the combination from competing with it in some part of the business which it carries on. The Anti-Trust law says nothing about competition and only prevents its suppression by contracts or combinations in restraint of trade. Justice Holmes closes his opinion in the following words: “I am happy to know that only a minority of my brethren adopted an interpretation of the law which in my opinion would make eternal the *bellum omnium contra omnes*, and disintegrate society so far as it could into individual atoms. If that were its intent, I should regard calling such a law a regulation of commerce as a mere pretence. It would be an attempt to reconstruct society. I am not concerned with the wisdom of such an attempt, but I believe that congress was not entrusted by the constitution with the power of making it, and I am deeply persuaded that it has not tried.”⁵⁵

The four decisions which have just been discussed were rendered on March 14, 1904. On April 11, the supreme court rendered the decision on the appeal from the decision of Judge Lochren, discussed in detail in Chapter V. The supreme court holds that it is without jurisdiction, and the case is sent back with directions that it be remanded to the state court. The state of Minnesota, as was noted above, had brought suit in the state courts, and on petition of the Northern Securities Company the case was transferred to the United States circuit court on the ground that violations of both the state laws and the federal anti-trust laws were involved. Considerable controversy arose over the right to remove the case to the federal court, with the result that the United States circuit court assumed jurisdiction which has now been declared by the

⁵³ U. S. S. C. (193 U. S. 197): 60.

⁵⁴ Ibid: 65.

⁵⁵ Ibid: 70.

supreme court to have been unwarranted. Commenting on the contention of the state that it had proprietary interests in the case, the court said: "The injury on account of which the present suit was brought is at most only remote and indirect.

. . . . If Minnesota may, by an original suit in its name, invoke the jurisdiction of the circuit court, because alone of the alleged remote and indirect injury to its proprietary interests arising from the mere absence of free competition in trade and commerce as carried on by interstate carriers within its limits, then every state, upon like grounds, may maintain, in its name, in the circuit court of the United States, a suit against interstate carriers engaged in business within their respective limits." The supreme court remanded the case to the state court in the following language: "For the reasons stated, we are of the opinion that the suit does not—to use the words of the act of 1875—really and substantially involve a dispute or controversy within the jurisdiction of the circuit court for the purpose of the final decree. That being the case, the circuit court following the mandate of the statute, should not have proceeded therein, but should have remanded the cause to the state court." The decision of the supreme court, consequently, leaves the case of the state of Minnesota against the Northern Securities Company at this date⁵⁶ in exactly the same condition that it was before the United States government instituted its proceedings.

⁵⁶ March, 1904. Nothing has been done with it since.

CHAPTER VIII.

EVENTS FOLLOWING THE FIRST DECISION OF
THE SUPREME COURT.

Soon after the supreme court decision, March 22, President Hill⁸⁷ issued a circular to the share-holders of the Northern Securities Company announcing a resolution of the Board of Directors, which was adopted with a view to meeting the decree of the court. The circular briefly refers to the beneficial effects which, in his estimation, the company has wrought by increasing commerce and reducing rates; it states that in the organization of the company no commissions were paid nor was any other expense incurred, except what was necessary in obtaining the charter and for the economical conduct of the affairs of the company; that the acquisition of the stock of the Northern Pacific and the Great Northern was made in the full belief that such purchase was not in violation of any law of the United States, which opinion, says the circular, has been approved by four justices of the United States supreme court; and that, in view of the adverse decision of the court, it was necessary to reduce the capital stock of the company and distribute to its share-holders the shares of the two constituent companies. The opinion was expressed that the order of the court would be fully and promptly complied with. A stock-holders' meeting was announced for April 21 at the company's office in Hoboken, N. J., and the transfer books for purposes of this meeting were to be closed on April 18, 1904. Under the laws of New Jersey a two-thirds vote of the share-holders is necessary in order to reduce the capital stock. In order to make it possible to distribute the May and subsequent dividends, prompt action was declared to be necessary. The prop-

⁸⁷ See copy of circular, appendix 7.

osition to be voted on provided in substance a reduction of the capital stock of the Northern Securities Company from 3,954,000 shares to 39,540 shares. The 99 per cent. of the present outstanding shares were to be called in for surrender and cancellation, and against each share of the stock thus surrendered the Securities Company was to deliver \$39.27 stock of the Northern Pacific Railway Company, and \$30.17 stock of the Great Northern Railway Company, and proportionate amounts for each fraction of a share of stock surrendered.

There were present at the stockholders' meeting of April 21, either in person or by proxy, 1,829 stockholders or about 72.75 per cent of the total number. This number of stockholders held 2,944,740 shares of the stock of the Securities Company or about 74½ per cent of the total outstanding capital stock. Excluding the 824,918 shares held by the Harriman interests there were absent from the stockholders' meeting less than 5 per cent of the total stock of the company. All the shares present at the meeting voted in favor of the plan proposed in the circular of March 22,⁵⁸ 1904. The Harriman interests protested at once that the plan of distribution was illegal and in violation of their rights.⁵⁹

On April 2, 1904, E. H. Harriman, Winslow S. Pierce, and the Oregon Short Line Railway Company petitioned the four circuit judges who had entered the original decree for leave to intervene with respect to the execution of this decree. The petitioners asserted that since November 18, 1901, they had been the registered owners and holders of \$82,491,871 par value of the capital stock of the Northern Securities Company, that these shares had been held in trust by the Equitable Trust Company of New York for the petitioners, and that the execution of the decree of the court would, in their opinion, necessitate the restoration of the status quo of the fall of 1901. Other facts relating to the original acquisition of these shares were enumerated. The petitioners discussed the pro rata plan for the distribution of the Northern Securities stock, as proposed by the board of directors, which they believed to be inequitable and unjust, and they asserted that they were will-

⁵⁸ 39: 105. See also circular of June 11, 1904, Appendix S.

⁵⁹ 41: 16.

ing to restore to the Northern Securities Company the original certificates of stock held by them. They argued that the pro rata plan, if consummated, would vest a majority of the stock of both the Great Northern and the Northern Pacific Railway Companies in the same individual stock-holders of the Great Northern Company who originally co-operated in the promotion and organization of the Northern Securities Company and who were still co-operating and acting in concert and combination and would continue the common management and direction of the two competing railway companies, and thus render the decree of the court ineffectual and defeat or evade its true intent and purpose. In view of all these facts, the petitioners prayed the court to enjoin and restrain the Securities Company from distributing its present holdings of stock under the proposed plan of pro rata distribution. This petition was served not only upon the attorneys for the Northern Securities Company, but also upon the attorney general of the United States. When the matter came up for hearing the attorney general filed a statement, saying that he had received a copy of the petition, that he did not affirm or deny its allegations, that the case had proceeded to final judgment, and that he objected to the intervention. "Upon appeal by the defendants to the supreme court of the United States, the decree of this court was confirmed in every particular, the effect of which was to end and close the case. The United States stands on the decree as affirmed, and submits that the court is only concerned to see that it is faithfully observed by the defendants according to its terms."⁶⁰ The petition was heard at St. Louis, beginning March 12, before the circuit judges who composed the trial court.⁶¹

The real question at issue was the construction of the decree, the petitioners claiming that a ratable distribution was forbidden by the decree, and a return *in specie* was demanded. They assumed that the title of the railway shares never passed to the Securities Company, but that the court by its decree had ordered their return. They maintained that by the amendment of the suit the United States acquired constructive cus-

⁶⁰ Letter of Attorney General Knox.

⁶¹ See p. 272.

today of or domination over the railway shares acquired by the Northern securities Company, and that by the decree the company was required to return the railway shares it received to those originally transferring them or their assignees. The attorney general interposed no objection to the ratable distribution which the petitioners characterized as an evasion of the decree. The court was asked to make the present permissive direction mandatory, and to provide simply in the decree that in its execution a return *in specie* shall be made obligatory. One of the attorneys for Harriman pointed out to the court the great benefits which would follow the possession of the Northern Pacific, and through it the Burlington, by the Oregon Short Line and Union Pacific interests. "Under the statutes of Utah, the Oregon Short Line Railway Company has power to hold this Northern Pacific stock; under the laws of Utah the Union Pacific would have that power; under the laws of congress the Union Central has the power; under the laws of congress the Union Pacific would have the power to hold this stock, because at no two points served by these roads is there any competition, and the characterizing of competition for trans-continental business is entirely different."⁶² Carrying out this idea, the same counsel maintained that if Harriman secured control over the Northern Pacific, he would promptly sever the connection between that railway and the Great Northern and Burlington. He claimed that Harriman could do much more for the Burlington than it was possible for Hill to do. "Where the Burlington gives to these two railways the markets of two or three states, the Union Pacific will give them access to the markets of thirteen states. Where this combination would give the Great Northern and the Northern Pacific access to one port, the combination of the Northern Pacific with the Union Pacific, through the Oregon Short line would give the people of the Northwest access to a dozen ports from San Francisco to New Orleans."⁶³ A list of states is then enumerated which will be served by the Union Pacific, if the "great plan conceived by the genius" of Harriman can be carried out. "The heavy freight of lumber or rough ma-

⁶² Argument of Mr. W. D. Guthrie; also 32, 33.

⁶³ Argument of Mr. W. D. Guthrie.

terial which Mr. Hill describes in his testimony, and which he throws through the Burlington, cramped up as it is to the middle states, is to be sent down to the south and southwest, and over the rocky mountains, and scattered all over this country in ten-fold to the markets that the Burlington system can afford."⁶⁴

The counsel for the Securities Company maintained that the decree of the court forbids action, but does not command it. It forbids the Northern Securities Company from voting or receiving dividends upon the railway shares, and the railway companies are forbidden from paying dividends on them to it. It was assumed that the concluding portion of the decree: "Nothing herein shall be construed to prohibit a return of the shares," was inserted to prevent any misapprehension of the provisions of the decree restraining voting power, that the court did not undertake to give any course or make any command with respect to the distribution of the shares, and that this matter was left entirely to the Securities Company, as the legal owner of the shares. It was further argued that if the Securities Company has legal title to the shares, it is its right and duty to distribute them pro rata among its share-holders. If it did not acquire legal title to them and the transaction was unlawful under the anti-trust law, Harriman was a party to an unlawful act, and having been a party to it, had no standing in equity. Harriman was a director of the Northern Pacific Railway Company, and a member of its executive committee. He was also a director of the Northern Securities Company, and a member of its executive committee. As a director he voted authorizing the sale of the shares to the Northern Securities Company for cash to the amount of millions of dollars. The shares of the Northern Pacific Railway Company have increased in value many millions of dollars. Under the petition, Harriman, in the Union Pacific interests, would not only get the Northern Pacific shares, but the increase in value, thus depriving other share-holders of the Security Company of any part of this increase. The relative status of the Harriman holdings of Northern Securities shares under the

⁶⁴ Argument of W. D. Guthrie.

proposed pro rata distribution and under the plan advocated by Mr. Harriman together with the income from each of these plans is shown below:

Character of Harriman holdings.	Par value of stock held.	Annual income.
Northern Sec. stock at 4 per cent. rate	\$82,491,871	\$3,299,674
Northern Sec. stock at 4¼ per cent. rate.....	82,491,871	3,712,134
Great Northern and Northern Pacific under pro rata distribution.....	56,709,330	3,989,667
Northern Pacific stock under original holdings, dividend rate 7 per cent.....	78,108,000	5,467,560

It was also argued that the petitioners were seeking gain through delay. "I do not doubt that he (the petitioner) would like to have blazoned through the newspapers of this country and Europe the announcement that your Honors had said that this distribution of the property shall be indefinitely postponed, and the result will be that if they fail in the evidence in getting the iniquitous demand that they make gratified in the award to them of the shares they claim, they will indirectly, through that delay, accomplish their purposes, by scaring from their holdings the very many people who could illy afford so to be dealt with, to make them sell their shares and pick them up at prices that will enable them then to have, if this court don't decree it, the majority that it wants."⁶⁵

On April 19, 1904, the decision of the circuit judges was rendered. It denied unanimously the application of the petitioners upon the following grounds:

(1) The plan of the directors of the Northern Securities Company for the distribution of the stock of the Great Northern and Northern Pacific Railway Companies is not violative of the decree in the Northern Securities case.

(2) No one but the United States can successfully appeal to the court to enjoin the execution of that plan on the ground that it is in violation of the Sherman Anti-Trust act, and the United States expresses satisfaction with the present decree.

(3) The stock of the two railway companies is not in the custody of the court.

⁶⁵ John G. Johnson, Oral Argument.

(4) An intervention is not necessary to enable the petitioners to protect any pecuniary interest or equity they have.

Judge Thayer delivered the opinion of the court. The formal entry of the court is as follows:

"The application of Edward S. Harriman, Winslow S. Pierce, and the Oregon Short Line Railroad Company for leave to intervene in this case was heard before this court on April 12 and 13, 1904, and after due consideration it is hereby ordered that the said application be and the same is hereby denied."

After this decision of the circuit court of the United States, the legal contest was shifted from the west to the east; and the history of the Securities case became almost exclusively legal. On petition of Harriman, Pierce, Oregon Short Line Railroad Company, and the Equitable Trust Company of New York,⁶⁶ Andrew Kirkpatrick, United States circuit judge, issued an order restraining the Northern Securities Company or any of its officers or agents from disposing of any of its stock until after the hearing and decision upon the motion for a preliminary injunction of Harriman, etc.⁶⁷ The motion and order were made on April 20, 1904, and the hearing set for April 25, 1904, in the city of Trenton, N. J.

The motion for the preliminary injunction is a short document of twenty-five lines, supported by a brief of a little over one hundred pages, supplemented later by a "reply brief" of about the same length.⁶⁸ The brief⁶⁹ recites the facts of the organization of the Northern Securities Company, maintains that the court has jurisdiction, repeats that the Securities Company holds the Northern Pacific shares as depository or custodian, denies the alleged equities of the stockholders of the Securities Company, insists upon the illegality of the original transfer of stock to the Securities Company, and presents specific figures expressing the threatened loss to the Harriman interests through the proposed plan of distribution.⁷⁰ The figures show that the annual income which would

⁶⁶ 36: 1.

⁶⁷ 36: 4.

⁶⁸ 38.

⁶⁹ 37.

⁷⁰ 37: 18, 35.

be collected by the Oregon Short Line Company on the proposed distributive shares of the Northern Pacific and Great Northern stock would be \$3,969,667, whilst the income which it would collect on the \$71,732,062 Northern Pacific stock would be equal to \$5,021,244, a difference in annual income of \$1,051,577. In general, the brief follows the lines of argument outlined above in connection with the proceedings before the four circuit judges. In fact, from an economic point of view, the case was closed with the supreme court decision of March 14, 1904, although it required another year and a second decision of the supreme court to end the controversy. Familiar facts were rehearsed over and over again, and citations accumulated in geometrical ratio. There may be a great deal in these conflicts between legal giants, representing industrialists of corresponding stature, which possesses value to the student of the principles and technicalities of law; but to a student of economics the interest is not maintained to the end.

On behalf of the Securities Company it was argued⁷¹ that the Northern Pacific stock had been actually sold to and acquired by the Securities Company, that this property (stock) was no longer in existence and could not be restored or returned in kind; that the decree of the trial court does not afford evidence in support of the complainants' bill; that, on the contrary, this decree expressly recognizes the Northern Securities Company as having title to the railway stocks it holds, and the right to distribute them ratably among its stockholders; and that the equities of the stockholders of the Securities Company forbid a restoration of the status quo, even if it were possible to do so, which it is not. The Securities Company also put in evidence depositions of Harri-man, Nichols, Hill, and others, chiefly containing facts which have been presented in the earlier chapters of this monograph; as well as the proceedings in court of Chancery of New Jersey, being the case of the Continental Securities Company against the Northern Securities Company.⁷² Together, all the briefs of argument and authorities relating to the preliminary injunction amounted to nearly 800 printed pages.

⁷¹ 39 and 40.

⁷² 39: 71-98.

The preliminary injunction asked for was granted, following the hearings of May 20-23, in the circuit court of the United States for the district of New Jersey, by Justice Bradford, July 15, 1904.⁷³ Justice Bradford stated that the relief prayed for in the petition or bill was in some particulars broader than that granted in the final decree of the trial court. He thought this to be not without significance, "although it is unnecessary now to discuss the point" With respect to some of the alleged facts, important in their bearing upon the equities of the case, the affidavits and exhibits were characterized as conflicting on substantial points, and "the final decision necessarily will involve the consideration of grave, novel and delicate questions of law." The judge did not think the case "ripe for a final decision," the present application being for a preliminary injunction.⁷⁴ The granting of a preliminary injunction will not interfere with the operation of the Northern Pacific Railway Company and the Great Northern Railway Company, or either of them, or otherwise prove detrimental to the interests of the public. While it would deprive stockholders for some time from receiving dividends, ample bonds can be provided for their protection.⁷⁵ An actual distribution on the pro rata plan, leaving only one per cent of the par value of the outstanding stock of the Northern Securities Company, or \$3,954,000, consisting wholly, or practically wholly of property other than stock of both or either of the two railway companies⁷⁶ would not only debar the Harriman interests from any relief to which they may be entitled under their present bill, but to a moral certainty entail upon them a burdensome multiplicity of suits attended with great labor and expense.⁷⁷ It would also obviously be calculated to hinder, embarrass, and probably or possibly defeat them in their effort to recover large quantities of such stock from persons purchasing the same in good faith and for full consideration, directly or indirectly, from the stockholders of the Northern Securities Company participating in such pro rata distribution, through the creation of new equities on the part of such

⁷³ 41.

⁷⁴ 41: 20.

⁷⁵ 41: 25.

⁷⁶ 41: 33.

⁷⁷ 41: 26.

purchasers. Whatever action is now taken, it should leave the Harriman interests in a position to enjoy the fruits of their victory in case the final decree should ultimately be determined in their favor. Furthermore, "it is manifestly improper that these matters should be decided on the fragmentary and inconclusive evidence now before the court. * *

* This court, as a court of equity, has power so to mold its decrees and to impose such terms as may be necessary to protect the equities of persons who may be affected by its action. * * * Under the circumstances, this court would not be justified in refusing the injunction sought. * * * An interlocutory decree for a preliminary injunction may be prepared and submitted."⁷⁸ The order for the injunction was entered August 18, 1904, from which an appeal was taken to the circuit court of appeals for the third circuit.⁷⁹ On January 3, 1905, the court of appeals reversed the injunctive order, and thereupon an application was made to the supreme court of the United States for the writ of certiorari, which was granted on January 30, and the matter advanced for hearing, and heard March 1 and 2. The supreme court announced the affirmance of the decree of the circuit court of appeals on March 6, 1905, it being added that an opinion would be filed afterwards.⁸⁰

While the documents in the case before the circuit court of appeals and the United States supreme court were not nearly so voluminous as the records and documents in the earlier cases, they are nevertheless of generous proportions. The second amended bill of complaint covered nearly 450 large printed pages and the briefs in each of the two last cases exceeded 600 pages. In view of the somewhat detailed analysis of the earlier documents which has been presented, these later documents may be passed over with only such notice as may be incidental to the presentation of the main points in the decision of the supreme court which finally terminated this many-sided legal contest. The history of the formation of the Northern Securities Company is recited briefly in several of the later documents, especially in the bill of complaint.⁸¹

⁷⁸ 41: 36-37.

⁷⁹ 42: 10.

⁸⁰ 49: 2, 14.

⁸¹ 35.

CHAPTER IX.

THE FINAL DECISION OF THE SUPREME COURT.

The final decision, as was stated above, was rendered on March 6, 1905. Generally speaking it upheld every important contention of the Northern Securities Company, and the Company has since distributed its stock in accordance with the plan adopted by its stockholders at the meeting of April 21, 1905. Chief Justice Fuller delivered the opinion of the court; and, unlike the decision of March 14, 1904, there were no dissenting opinions.

Taking up the chief contention of the Harriman party, that the Northern Securities Company did not become owner of the Northern Pacific shares, but simply trustee or bailee, and that this claim is justified by the decree of April 9, 1903, the decision of the trial court, Chief Justice Fuller says that the Harriman interests "were not parties of record to that suit, and that they were not parties by representation, if the effect of the transfer as between the parties thereto had been an issue and the vital conflict between complainants and the corporation, now set up, then existed, which would destroy community of interest on which the rule of representation is founded. And, on the other hand, in that suit the Northern Securities Company, at a time when complainant Harriman was a director, answered that: 'Every share of the Great Northern Company and the Northern Pacific Company acquired by this defendant has been, and so long as it remains the property of the defendant will continue to be, held and owned by it in its own right, and not under any agreement, promise, or understanding on its part, or on the part of its stockholders and officers, that the same shall be held, owned or kept by it for any period of time whatever, or under any

agreement that in any manner restricts or controls to any extent any use of the same which might lawfully be exercised by any other owner of said stocks.'” The opinion further states that “the circuit court did not determine the quality of the transfer as between the defendants themselves, nor was that the purpose of the government proceedings.” After commenting upon certain features of the decree and referring to its terms, he says further: “This did not involve a decision that any original vendor of the railway shares was entitled to a judicial restitution thereof; and such was the view of the circuit court itself.” The decree was permissive but not mandatory in its reference to a return of the shares of stock by the Northern Securities Company. The contention of counsel for Harriman that certain expressions in the opinion of Justice Harlan of March 14, 1904, so enlarged the scope of the decree as to give it the effect now attributed to it by the complainants (Harriman, etc.) was characterized as a suggestion “inconsistent with the settled rule that general expressions in an opinion, which are not essential to dispose of a case, are not permitted to control the judgment in subsequent suits.” Treating the question as an open one, it seemed to the court “indisputable that, as between these parties, the transaction was one of purchase and sale.” In this connection the supreme court confirmed the position of the circuit court of appeals that Harriman himself had distinctly testified that the Northern Pacific stock in question was sold, that he, principally, negotiated the sale; and that there was not attached to the negotiations any condition except as to price. And these statements, said the supreme court, Harriman should not now be permitted to deny as a statement of fact. By the provisions of its charter, the Securities Company had power to buy and sell shares of stock, and, in the discretion of its directors and of the holders of two-thirds of its capital stock, at any time, on notice, to dissolve and to wind up the corporation and distribute its assets. Harriman subjected himself to this power when he accepted the shares of the Northern Securities Company as part payment for his Northern Pacific shares.

“In the present case complainants seek the return of prop-

erty delivered to the Securities Company pursuant to an executed contract of sale on the ground of the illegality of that contract, but the record discloses no special considerations of equity, justice or public policy, which would justify the courts in relaxing the rigor of the rule which bars a recovery.

"The circuit court decrees put at rest any question that the ratable distribution resolved upon was in violation of public policy.

"And it is clear enough that the delivery to complainants of a majority of the total Northern Pacific stock and a ratable distribution of the remaining assets to the other Securities stockholders would not only be in itself inequitable, but would directly contravene the object of the Sherman law and the purposes of the Government suit.

"The Northern Pacific system, taken in connection with the Burlington system, is competitive with the Union Pacific system, and it seems obvious to us, the entire record considered, that the decree sought by complainants would tend to smother that competition.

"While the superior equities, as against complainants' present claim, of the many holders of Securities shares who purchased in the reliance on the belief that they thereby acquired a ratable interest in all of the assets of the Securities Company, are too plain to be ignored.

"The illegal contract could not be made legal by estoppel, but the ownership of the assets, unaffected by a special interest in complainants, could be placed beyond dispute on their part by their conduct in holding the Securities Company out to the world as unconditional owner.

"And without repeating in detail what has been already set out, it is plain that right of rescission of the executed contract of November 18, 1901, even if rescission could have otherwise been sustained, had been lost by acquiescence and laches at the time this bill was filed.

"Since the transfer of that date Securities stock had passed into the hands of more than 2,500 holders, many of them in Great Britain, France and other parts of Europe; nearly a year after the filing of the government bill 75,000 shares were sold for cash, complainant Harriman concurring; some months

after, Harriman and Pierce and the Oregon Short Line Company pledged their 824,000 shares to the Equitable Trust Company; notwithstanding the decree of April 9, 1903, they stood upon their rights as shareholders; and it was not until after March 22, 1904, when defendant's board of directors resolved upon a ratable distribution that complainants undertook to change an election already so pronounced as to be irrevocable in itself in view of the rights of others.

"We regard the contention that complainants are exempt from the doctrine *in pari delicto*, because the parties acted in good faith and without intention to violate the law, as without merit. With knowledge of the facts and of the statute, the parties turned out to be mistaken by supposing that the statute would not be held applicable to the facts. Neither can plead ignorance of the law as against the other, and defendant secured no unfair advantage in retaining the consideration voluntarily delivered for the price agreed.

"Perhaps it should be noticed that the bill sought the return of two parcels of Northern Pacific common stock, the 370,230 shares delivered to the Securities Company, November 18, 1901, and the 347,090 shares received December 27, 1901, from the Northern Pacific Company on the retirement of preferred stock.

"Early in 1901 the Hill-Morgan party held a majority of the common stock, and had asserted the intention to retire the preferred stock, 'without', as Mr. Harriman testified, 'affording the holders of the preferred stock the right to participate in any new securities that might be issued.'

"With full knowledge of that intention the proceedings of the two companies followed in November, 1901, and the absolute and unconditional sale and purchase, as we hold the transaction to have been.

"We find no evidence of any express agreement that complainants should be entitled to the new common stock, and it was certainly not the natural increase of the old stock, but the result of the exercise of the right of subscription. The purchase of the Securities Company was on its own account and not in trust, and cannot be disturbed because of illegal purpose at the clamor of parties *in pari delicto*. And there is

here no offer of the restoration of the *status quo*, if that were practicable.

"Doubtless it became the duty of the Securities Company to end a situation that had been adjudged unlawful, and this could be effected by sale and distribution in cash, or by distribution in kind, and the latter method was adopted, and wisely adopted, as we think, for the forced sale of several hundred millions of stock would have manifestly involved disastrous results.

"In fine, the title to those stocks having intentionally been passed, the former owners or part of them cannot reclaim the specific shares and must be content with their ratable proportion of the corporate assets."

CHAPTER X.

CONCLUSIONS.

Whatever conclusions this study may suggest have been indicated in the text, and do not require a re-statement in this brief final chapter. There are a few ideas connected with this study, however, which, as they appear to me to be somewhat fundamental, deserve to be expressed in the closing paragraphs, even at the risk of repetition.

The chief interest of the Northern Securities case lies in the magnitude of the interests involved and in the variety of the economic and legal problems which were incidentally drawn into the controversy. From the point of view of railway organization, the case presents little of consequence, except that railway corporate organization, in the process of metamorphosis or evolution, must avoid the technicality of the particular type of a holding company which the Northern Securities Company represented. From the point of view of railway regulation and the relations between the general public interests and private railway management, the case has no significance whatsoever, in spite of the fact that action against the Securities Company arose out of alleged injurious consequences to the public. It was assumed that competition had been stifled without first asking the question whether competition had actually existed; and whether, if competition could be perpetuated, the public would profit by it. Opposition to the Securities Company rested chiefly upon the same ground that opposition to agreements among railway companies, pools, and all co-operative movements among carriers has generally rested. This indiscriminating opposition to all forms of open concerted action on the part of the railways is in my mind the greatest single blunder in our public policy toward railways. I say "open" concerted action, for every

one who knows what is going on is aware of the fact that agreements which rest upon "what each was saying as he looked at his neighbor" have never ceased to exist, and that this form of agreement is the only guarantee against progressive anarchy in railway matters where the law forbids every other form. It is also a fact of common knowledge that such tacit agreements are generally as effective as those which have at times been made known to the public as illegal contracts. I also wish to repeat, what I have expressed heretofore, that I regard the application to railways of the Sherman anti-trust law of 1890 as one of the gravest errors in our legislative history. It is demonstrable that if railway companies had been permitted to co-operate with one another under the supervision of competent public authority, and the Trans-Missouri and Joint Traffic cases had never been decided, the railway situation in the United States would today be appreciably better than it is. However, this is speculation. Nevertheless, even today some legislation which will enable companies to act together under the law, as they now do quietly among themselves outside of the law, is imperative. The American public seems to be unwilling to admit that agreements will and must exist, and that it has a choice between regulated legal agreements and unregulated extra-legal agreements. We should have cast away more than fifty years ago the impossible doctrine of protection of the public by railway competition. We still need a campaign of education on the limitations of competition among public carriers and adequate legislation for the protection of all interests where competition fails.

In expressing these views, I by no means question the motives of the officers of the law who prosecuted the case. Laws should be enforced. The supreme court has said that the Northern Securities Company violated the law, and that should end the matter. But what about the law? Then, too, the prosecution of the Securities case had an undoubted wholesome influence on all great corporations. It was a moral tonic.

From the point of view of railway management, some diversity of opinion existed then and still exists. Able and experi-

enced railway men have expressed the opinion that the Securities Company form of organization is autocratic and narrowing in its effect upon the rank and file; that it restricts the field for honest ambition, and tends to develop excessive dependence upon a very small number of individuals in control. This might not be true in this particular case, they argued, but the system was there which is capable of developing what they objected to. On the other hand, the Securities Company represented greater unity in management and stability in policy. The question arises as to what extent this unity should be developed. The late president of the Southern Pacific believed in one gigantic organization for the whole United States. Few will venture to this length. Two heads working independently of each other are more likely to invent something new or improve the old than one. There can be no question that the preservation of the autonomy of management of a considerable number of companies will ultimately bring about more efficient organization and management on the part of all of them. In this respect, competition can, and should always, endure. However, this is a question for professional railway men rather than for students of the economics of transportation.

A discussion of the results of the case from the purely legal point of view I must leave to the lawyers.

APPENDIX 1.

CERTIFICATE OF INCORPORATION

OF

NORTHERN SECURITIES COMPANY.

We, the undersigned, in order to form a corporation for the purposes hereinafter stated, under and pursuant to the provisions of the Act of the Legislature of the State of New Jersey, "An Act Concerning Corporations (Revision of 1896)," and entitled the Acts amendatory thereof and supplemental thereto, do hereby certify as follows:

FIRST. The name of the corporation is

NORTHERN SECURITIES COMPANY.

SECOND. The location of its principal office in the State of New Jersey is at No. 51, Newark Street, in the City of Hoboken, County of Hudson. The name of the agent therein, and in charge thereof, upon whom process against the corporation may be served, is Hudson Trust Company. Such office is to be the registered office of the corporation.

THIRD. The objects for which the corporation is formed are:

(1) To acquire by purchase, subscription or otherwise, and to hold as investment, any bonds or other securities or evidences of indebtedness, or any shares of capital stock created or issued by any other corporation or corporations, association or associations, of the State of New Jersey or of any other state, territory or country.

(2) To purchase, hold, sell, assign, transfer, mortgage, pledge, or otherwise dispose of, any bonds or other securities or evi-

dences of indebtedness created or issued by any other corporation or corporations, association or associations, of the State of New Jersey, or of any other state, territory or country, and, while owner thereof, to exercise all the rights, powers and privileges of ownership.

(3) To purchase, hold, sell, assign, transfer, mortgage, pledge or otherwise dispose of shares of the capital stock of any other corporation or corporations, association or associations, of the State of New Jersey, or of any other state, territory or country; and, while owner of such stock, to exercise all the rights, powers and privileges of ownership, including the right to vote thereon.

(4) To aid in any manner any corporation or association of which any bonds or other securities or evidences of indebtedness or stock are held by the corporation; and to do any acts or things designed to protect, preserve, improve or enhance the value of any such bonds or other securities or evidences of indebtedness or stock.

(5) To acquire, own and hold such real and personal property as may be necessary or convenient for the transaction of its business.

The business or purpose of the corporation is from time to time to do any one or more of the acts and things herein set forth.

The corporation shall have power to conduct its business in other states and in foreign countries, and to have one or more offices out of this state, and to hold, purchase, mortgage and convey real and personal property out of this state.

FOURTH. The total authorized capital stock of the corporation is Four Hundred Million Dollars (\$400,000,000), divided into four million (4,000,000) shares of the par value of one hundred dollars (\$100) each. The amount of the capital stock with which the corporation will commence business is thirty thousand dollars.

FIFTH. The names and post office addresses of the incorporators, and the number of shares of stock subscribed for by each (the aggregate of such subscriptions being the amount of capital stock with which this company will commence business) are as follows:

<i>Name and Post Office Address.</i>	<i>Number of shares.</i>
George F. Baker, Jr., 258 Madison Avenue, New York, New York,.....	100
Abram M. Hyatt, 214 Allen Avenue, Allenhurst, New Jersey,	100
Richard Trimble, 53 East 25th Street, New York, New York,	100

SIXTH. The duration of the corporation shall be perpetual.

SEVENTH. The number of directors of the corporation shall be fixed from time to time by the by-laws; but the number if fixed at more than three, shall be some multiple of three. The directors shall be classified with respect to the time for which they shall severally hold office by dividing them into three classes, each consisting of one-third of the whole number of the board of directors. The directors of the first class shall be elected for a term of one year; the directors of the second class for a term of two years; and the directors of the third class for a term of three years; and at each annual election the successors to the class of directors whose term shall expire in that year shall be elected to hold office for the term of three years, so that the term of office of one class of directors shall expire in each year.

In case of any increase of the number of the directors the additional directors shall be elected as may be provided in the by-laws, by the directors or by the stockholders at an annual or special meeting, and one-third of their number shall be elected for the then unexpired portion of the term of the directors of the first class, one-third of their number for the unexpired portion of the term of the directors of the second class, and one-third of their number for the unexpired portion of the term of the directors of the third class, so that each class of directors shall be increased equally.

In case of any vacancy in any class of directors through death, resignation, disqualification or other cause, the remaining directors, by affirmative vote of a majority of the board of directors, may elect a successor to hold office for the unexpired portion of the term of the director whose place shall be vacant, and until the election of a successor.

The board of directors shall have power to hold their meetings

outside the State of New Jersey at such places as from time to time may be designated by the by-laws, or by resolution of the board. The by-laws may prescribe the number of directors necessary to constitute a quorum of the board of directors, which number may be less than a majority of the whole number of the directors.

As authorized by an Act of the Legislature of the State of New Jersey passed March 22, 1901, amending the 17th section of the Act Concerning Corporations (Revision of 1896), any action which theretofore required the consent of the holders of two-thirds of the stock at any meeting after notice to them given, or required their consent in writing to be filed, may be taken upon the consent of, and the consent given and filed by, the holders of two-thirds of the stock of each class represented at such meeting in person or by proxy.

Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the whole board of directors. Any other officer or employe of the corporation may be removed at any time by vote of the board of directors, or by any committee or superior officer upon whom such power of removal may be conferred by the by-laws, or by vote of the board of directors.

The board of directors, by the affirmative vote of a majority of the whole board, may appoint from the directors an executive committee, of which a majority shall constitute a quorum; and to such extent as shall be provided in the by-laws, such committee shall have and may exercise all or any of the powers of the board of directors, including power to cause the seal of the corporation to be affixed to all papers that may require it.

The board of directors may appoint one or more vice-presidents, one or more assistant treasurers and one or more assistant secretaries; and, to the extent provided in the by-laws, the persons so appointed respectively shall have and may exercise all the powers of the president, of the treasurer, and of the secretary, respectively.

The board of directors shall have power from time to time to fix and to determine and to vary the amount of the working capital of the corporation; to determine whether any, and, if any, what part of any, accumulated profits shall be declared in

dividends and paid to the stockholders; to determine the time or times for the declaration and the payment of dividends; and to direct and to determine the use and disposition of any surplus or net profits over and above the capital stock paid in; and in its discretion the board of directors may use and apply any such surplus or accumulated profits in purchasing or acquiring its bonds or other obligations, or shares of the capital stock of the corporation, to such extent and in such manner and upon such terms as the board of directors shall deem expedient; but shares of such capital stock so purchased or acquired may be resold, unless such shares shall have been retired for the purpose of decreasing the capital stock of the corporation to the extent authorized by law.

The board of directors from time to time shall determine whether and to what extent, and at what time and places, and under what conditions and regulations, the accounts and books of the corporation, or any of them, shall be open to the inspection of the stockholders, and no stockholder shall have any right to inspect any account or book or document of the corporation, except as conferred by statute of the State of New Jersey, or authorized by the board of directors, or by a resolution of the stockholders.

The board of directors may make by-laws, and, from time to time, may alter, amend or repeal any by-laws; but any by-laws made by the board of directors may be altered or repealed by the stockholders at any annual meeting, or at any special meeting, provided notice of such proposed alteration or repeal be included in the notice of the meeting.

IN WITNESS WHEREOF, We have hereunto set our hands and seals, the twelfth day of November, 1901.

GEO. F. BAKER, JR. [L. S.]

ABRAM M. HYATT. [L. S.]

RICHARD TRIMBLE. [L. S.]

Signed, sealed and delivered in the presence of

GEO. HOLMES.

STATE OF NEW YORK,
County of New York, }
Manhattan. } ss:

Be it remembered that on this twelfth day of November, 1901, before the undersigned, personally appeared George F. Baker, Junior, Abram M. Hyatt, Richard Trimble, who, I am satisfied, are the persons named in and who executed the foregoing certificate; and I having first made known to them, and to each of them, the contents thereof, they did each acknowledge that they signed, sealed and delivered the same as their voluntary act and deed.

GEO. HOLMES,
Master in Chancery of New Jersey.

APPENDIX 2.

STATEMENT OF CARGO FORWARDED ON STEAMSHIP, "MINNESOTA," FROM SEATTLE, JANUARY 23, 1905, IN TONS OF 2,000 LBS.

COMMODITY.	DESTINATION.	TOTAL.
Raw cotton,.....	Yoho & Kohe,.....	3735
Wire,	Yoho & Kohe,.....	107
Leather,	Yoho & Kohe,.....	139
Machinery,	Yoho & Kohe,.....	580
Nails,	Yoho & Kohe,.....	976
P. H. Products,.....	Yoho & Kohe,.....	3
Lub oil,.....	Kobo, Japan,.....	24
Corn,	Yoko, Japan,.....	33
Barley,	Yoko, Japan,.....	100
Flat cars,.....	Yoko, Japan,.....	704
Lub oil,.....	Yoko, Japan,.....	24
Struct. iron,.....	Yoko, Japan,.....	12
Rail joints,.....	Yoko, Japan,.....	150
Paper,	Yoko, Japan,.....	20
Leaf tobacco,.....	Yoko, Japan,.....	20
Copper,	Yoko, Japan,.....	336
Total Japan,.....		6963
C. P. Goods,.....	Shanghai, China,.....	1059
Beer,	Shanghai, China,.....	16
Cigarettes,	Shanghai, China,.....	227
Leaf tobacco,.....	Shanghai, China,.....	40
Nails,	Shanghai, China,.....	155
Copper,	Shanghai, China,.....	112
P. H. Products,.....	Shanghai, China,.....	227
Total Shanghai,.....		1836

Wire,	Hong Kong, China,.....	24
Oats,	Manila, P. I.,.....	600
P. H. Products,.....	Manila, P. I.,	5
Total Manila,.....		605
Condensed milk,.....	various	660
Miscl. Mdse.,.....	various	8
Total various,.....		668

LOCAL FREIGHT.

Flour,	473
Canned salmon,.....	143
Hay,	262
Beer,	31
Lumber,	79
Miscl. Mdse.,.....	13
Total local,.....	1001

TOTAL CARGO.

Total overland,.....	10096
Total local,.....	1001
	11097

Full cargo was 21,000 tons.

APPENDIX 3.

FORM OF CERTIFICATE OF NORTHERN PACIFIC
RAILWAY COMPANY PREFERRED STOCK.

Shares.	RAILWAY	COMPANY.	Shares.
	NORTHERN PACIFIC		
	New York	Certificate.	
No.	00000		10 Shares
	Preferred Stock.	Preferred Stock.	

This is to certify that ——— is the owner of ten fully paid and nonassessable shares, of the par value of one hundred dollars each in the preferred capital stock of the Northern Pacific Railway Company, transferable only in person, or by attorney, upon the books of the company, at the office of its transfer agents in the city of New York, upon surrender of this certificate. The holders of the preferred stock of the company shall be entitled to noncumulative dividends for each fiscal year, when and as declared by the board of directors of the company, to the extent of four per cent per annum, payable quarterly on the first days of March, June, September, and December, out of any surplus net profits of the company, as determined by said board, before any dividends shall be declared or paid for or in such fiscal year on the common stock, and without deduction for any tax or taxes imposed by the United States or by any state or municipality thereof that the railway company may at any time be required to pay or to retain therefrom. Dividends on the common stock may be declared and paid out of any surplus net profits remaining from any previous fiscal year or years, for which the full dividends at the rate of four per cent per annum shall have been paid on the preferred stock; but after dividends to the extent of four per cent shall have been declared for any one fiscal year on all the stock of the company (common as well as preferred), any

further dividends for that fiscal year shall be declared only for the equal ratable benefit of all the stock, whether preferred or common. No dividends shall be paid on the common stock out of surplus net profits of any year for which the full dividends shall not have been paid on the preferred stock. Whenever the full and regular quarterly dividends for two successive quarterly periods after July 1st, 1897, on the preferred stock at the rate of four per cent per annum shall not have been paid in cash, then and in that event at the next annual meeting such number, and only such number, of directors as will constitute a majority of the whole board shall be elected by a separate ballot by the holders of the preferred stock present or represented at such meeting, and the remainder of the board shall be elected by a separate ballot by the holders of the common stock present or represented at such meeting, in every case each share to be entitled to one vote. The company shall not put a mortgage upon its property formerly embraced in the system of the Northern Pacific Railroad Company, nor shall the amount of the preferred stock be increased except after obtaining in each instance the consent of the holders of a majority of the whole amount of the preferred stock given at a meeting of the stockholders called for that purpose, and the consent of the holders of a majority of such part of the common stock as shall be represented at such meeting, the holders of each class of stock voting separately. The company shall have the right at its option, and in such manner as it shall determine, to retire the preferred stock in whole or in part, at par, from time to time, upon any first day of January prior to 1917.

All dividends declared on the preferred stock registered in Berlin will be payable there at the rate of 4.20 marks per dollar. This certificate is not valid unless duly registered by the registrar of transfers of the company in the city of New York.

Witness the signatures of the president or one of the vice-presidents of said company, and of J. P. Morgan & Co., its transfer agents in the city of New York.

New York

Transfer agents.

(Specimen.)

Vice-president.

STATE OF	WISCONSIN.
Shares \$100 each.	Shares \$100 each.

Registered:

CENTRAL TRUST COMPANY OF NEW YORK,
Registrar.

By ———, *Secretary.*

Endorsed:

For value received — hereby sell, assign, and transfer unto
—— shares of the capital stock represented by the within cer-
tificate, and do hereby irrevocably constitute and appoint ——
attorney to transfer the said stock on the books of the within-
named company, with full power of substitution in the premises.

Dated, ———, 19—.

APPENDIX 4.

UNDERWRITERS' AGREEMENT.

In presence of ——— ———.

Agreement between Standard Trust Company and certain underwriters, dated November 18, 1901.

Agreement made this 18th day of November, 1901, between the Standard Trust Company of New York (hereinafter called the "Trust Company"), party of the first part, and the other signers of this agreement, or of counterparts thereof (hereinafter called the "Subscribers"), parties of the second part.

The Trust Company, at the request of the subscribers, has made or is about to make an agreement with the Northern Pacific Railway Company of even date herewith (a copy of which is hereto annexed and marked "Exhibit A"), upon the express condition that the subscribers hereto enter into this agreement.

In consideration of the premises, the parties have agreed as follows:

I. The Subscribers hereby severally agree with the Trust Company and with each other to pay to the Trust Company upon its demand, in the proportions set opposite their respective signatures hereto, such sums of money as the Trust Company may from time to time require to meet its obligations under this agreement with the Northern Pacific Railway Company, and the Subscribers further agree in such several proportions to hold the Trust Company harmless from any loss, liability, or expense under or by reason of said agreement with the Northern Pacific Railway Company, or because of any distribution hereunder of the securities to be received by the Trust Company under said agreement.

II. The Subscribers shall severally be entitled to share, in the proportions set opposite their respective signatures hereto, in the benefits of said agreement and in all convertible certificates and common stock of the Northern Pacific Railway

Company which shall remain with the Trust Company after the performance of its obligations under said agreement.

III. The Trust Company shall issue to the Subscribers suitable certificates of participation referring to this agreement, upon which certificates any payments made by the Subscribers shall be endorsed. The Trust Company shall be entitled to reimbursement for its expenses and to reasonable compensation. The written advice of counsel shall be full protection to the Trust Company, as against the Subscribers, for any action it may from time to time take hereunder or in connection with said agreement. This agreement shall bind the executors and administrators of the respective Subscribers.

In witness whereof The Standard Trust Company of New York has caused this instrument to be executed, and its corporate seal to be hereunto affixed by its proper officers, and the parties of the second part have hereunto set their hands the day and year first above written.

THE STANDARD TRUST COMPANY OF NEW YORK,
By Wm. C. Lane, President.
(Corporate Seal.)

Attest: W. C. Cox, Secretary.

Signature of Subscriber.	Proportion of Entire Obligation Taken by Subscriber.
Kuhn, Loeb & Co.....	One-third (1/3) or twenty-five mil- lion dollars (\$25,000,000).
J. P. Morgan & Co.....	One-third (1/3) or twenty-five mil- lion dollars (\$25,000,000).
Jas. J. Hill.....	One-ninth 1/9) } or 1/3.
Geo. F. Baker.....	One-ninth 1/9) }
John S. Kennedy.....	One-ninth 1/9) }

Memorandum of agreement, made this — day of Novem-
ber, A. D. 1901, by and between Northern Pacific Railway
Company, a corporation of the State of Wisconsin, of the first
part, and The Standard Trust Company of New York, a cor-
poration of the State of New York (hereinafter termed the
"Trust Company"), of the second part.

Witnesseth, that the parties hereto have mutually agreed as
follows:

ARTICLE I.

On January 1, 1902, Northern Pacific Railway Company agrees to sell and to deliver to the Trust Company, and the Trust Company agrees to buy from Northern Pacific Railway Company, at their face value, all the convertible certificates of indebtedness of the Northern Pacific Railway Company for the aggregate principal sum of seventy-five million dollars (\$75,000,000), of the issue authorized by vote of the directors of said company passed November 13, 1901, except such of said certificates as shall be purchased by the holders of the common stock of said corporation, as recited in Article III. of this agreement.

Such convertible certificates are to be dated November 15, 1901, and to be payable on January 1, 1907, in gold coin of the United States of the present standard of weight and fineness, at said company's office in the city of New York, and to bear interest in like gold coin at the rate of four per cent per annum from January 1, 1902, payable semi-annually at said office. Every such certificate shall be convertible into shares of the common stock of the Northern Pacific Railway Company at the rate of one share of one hundred dollars (\$100) par value for each one hundred dollars (\$100) of the principal of such certificate remaining unpaid at the date of such conversion; and upon surrender to it of any such certificate said Railway Company will issue to the holder of such surrendered certificate shares of its common stock at the rate aforesaid. Such conversion may be made by the Northern Pacific Railway Company, at its option, at any time after November 15, 1901, and shall be made at the demand of any holder of such certificate at any time on or after January 1, 1902. Such certificates shall be in denominations each of one thousand dollars, or some multiple thereof, and shall be substantially of the tenor of the draft thereof, marked "Exhibit A," hereto attached.

Until engraved or lithographed certificates can be prepared, temporary certificates, in form satisfactory to the Trust Company, shall be delivered hereunder, which temporary certificates shall be exchangeable for engraved or lithographed certificates as soon as the same shall be ready for delivery.

ARTICLE II.

Northern Pacific Railway Company covenants and agrees with the Trust Company that all moneys received for such certificates shall be specifically appropriated and used exclusively for the retirement of the preferred stock of the Northern Pacific Railway Company at par, and shall be set apart as a trust fund for such purpose.

ARTICLE III.

It is understood and agreed that suitable opportunity shall be given to every holder of common stock of the Northern Pacific Railway Company registered at the closing of the transfer books on December 10, 1901, to purchase and to pay for, at the price hereinafter stated, an amount of such certificates (subject to a proper adjustment for fractional amounts of certificates) equal to seventy-five eightieths of the par amount of such common stock owned of record by such stockholder.

At any time prior to the sale and delivery of such certificates to the Trust Company, the Northern Pacific Railway Company may sell and deliver, at the price hereinafter stated, to any such holder of common stock, the amount of such certificates which such holder of common stock is to be given such opportunity to purchase; but in case any such sale be made to any stockholder prior to the closing of the transfer books on December 10, 1901, such arrangements shall be made as will prevent any transfer of such stock before the reopening of the transfer books on January 2, 1902, except subject to the condition that the transferees and subsequent holders of such stock prior to such reopening of the transfer books shall release any and all right to purchase any of such certificates from the Northern Pacific Railway Company. As soon as practicable the Northern Pacific Railway Company, by notice, shall extend to each holder of its common stock registered at the closing of the transfer books on December 10, 1901, suitable opportunity until January 1, 1902, to purchase at the price hereinafter stated an amount of such certificates (subject to adjustment as aforesaid) equal to seventy-five

eightieths of the par amount of such common stock owned of record by such stockholder.

After the sale and delivery to the Trust Company of such of said certificates as shall not have been purchased by the stockholders of the Northern Pacific Railway Company, the Trust Company will give to every holder of common stock of said company registered at the closing of the transfer books on December 10, 1901 (other than holders of common stock who previously shall have purchased or shall have had suitable opportunity to purchase a ratable share of such certificates as aforesaid), suitable opportunity, not later than March 1, 1902, to receive on demand, through or from the Trust Company, upon payment to the Trust Company of the price hereinafter stated, an amount of such certificates (subject to adjustment as aforesaid) equal to seventy-five eightieths of the par amount of such common stock owned of record by such stockholder (or a like amount of common stock received upon conversion of such certificates if theretofore converted).

The price payable for all such certificates sold under this article on or before January 1, 1902, shall be a sum equal to the principal thereof. The price payable for all such certificates sold and delivered under this article after January 1, 1902, shall be a sum equal to the principal thereof, and the interest accrued thereon. The price payable for any stock received upon conversion of such certificates shall be the same as the price which would have been payable for a corresponding amount of such certificates.

Under the provisions of this article every such holder of common stock shall only be given the opportunity to purchase, either from the Trust Company or from the Northern Pacific Railway Company, such amount of such certificates (or stock) as in the aggregate shall be equal to seventy-five eightieths of the par amount of the common stock owned of record by such stockholder at the closing of the transfer books on December 10, 1901.

U. of M.

ARTICLE IV.

In case the Northern Pacific Railway Company shall fail to sell and to deliver such certificates to the Trust Company at the times and in the manner herein provided, or shall fail to comply with its agreements herein contained, or in case the Northern Pacific Railway Company shall fail to issue its common stock in exchange for all certificates delivered hereunder to the Trust Company when and as demand therefor shall be made by the Trust Company or other holder, then and in any such case the Trust Company, at its option, by notice delivered at the office of the Northern Pacific Railway Company in the city of New York may forthwith rescind this agreement, and thereupon the Northern Pacific Railway Company, upon surrender to it of any of such certificates, shall be bound to repay to the Trust Company or other holder the price paid for such certificates hereunder, with proper allowance of interest.

This agreement shall be deemed strictly *inter partes*, and shall not give any rights to any person or corporation except the Trust Company and the Northern Pacific Railway Company, except as provided in the certificates themselves.

In witness whereof the parties hereunto have caused these presents to be signed by their officers duly authorized the day and year first above written.

NORTHERN PACIFIC RAILWAY COMPANY,

By _____.

THE STANDARD TRUST COMPANY OF NEW YORK,

By _____.

APPENDIX 5.

NORTHERN PACIFIC RAILWAY COMPANY, DIRECTORS EIGHTY-THIRD MEETING, NOVEMBER, 13, 1901.

At a meeting of the board of directors held pursuant to due notice at the office of the company, No. 49, Wall street, New York City, on Wednesday, November 13, 1901, at 2 o'clock p. m., there were present the following newly elected directors (constituting a quorum) viz:

Messrs. Baker, Harriman, Hill, Ives, James, Kennedy, Lamont, Mellen, Rea, Rockefeller, Steele, Stillman, Thomas, Twombly.

On motion Mr. Ives was chosen to act as chairman. He thereupon took the chair and announced the meeting ready for organization.

The secretary then submitted the report of the inspectors of election showing that at the annual meeting of stockholders held on October 1, 1901, the following were elected directors for the ensuing year, to wit:

Robert Bacon, George F. Baker, Edward H. Harriman, James J. Hill, Brayton Ives, D. Willis James, John S. Kennedy, Daniel S. Lamont, Charles S. Mellen, Samuel Rea, William Rockefeller, Charles Steele, James Stillman, Eben B. Thomas, Hamilton McK. Twombly.

The directors then proceeded to the election of officers.

On motion, it was

Resolved, That the secretary be, and hereby he is, directed to cast a ballot in favor of the election of the following-named persons to serve as officers of this company for the ensuing year, to wit:

For president, Charles S. Mellen.

For vice-president, Daniel S. Lamont.

For comptroller, Henry A. Gray.

For treasurer, Charles A. Clark.

For secretary and assistant treasurer, George H. Earl.

For assistant secretary, Richard H. Relf.

For general counsel in New York, Francis Lynde Stetson.

For general counsel in Saint Paul, Charles W. Bunn.

The secretary cast the ballot as directed, and the chairman announced that the above-named persons were duly elected to the offices set opposite their names, respectively.

Mr. Ives then resigned the chair in favor of Mr. Mellen.

The resignation of Mr. Robert Bacon as a director of this company was presented, and, on motion, the same was accepted.

Mr. Samuel Spencer was nominated as a director to fill the vacancy caused by the resignation of Mr. Bacon, and on motion, the secretary was directed to cast a ballot in favor of the election of Mr. Spencer. This was done, and the chairman announced that Mr. Samuel Spencer had been duly elected a director of this company to fill the existing vacancy.

On motion of Mr. Steele, it was

Resolved, That the following directors be, and hereby they are, appointed as the executive committee of this company, viz:

Messrs. Baker, Harriman, Hill, Kennedy, Spencer, and the president, or in his absence, the vice-president, exofficio.

The following preamble and resolutions, offered by Mr. Kennedy and seconded by Mr. Baker, were unanimously adopted:

Whereas, under and pursuant to an agreement dated July 13, 1896, the Northern Pacific Railway Company did acquire from Messrs. J. P. Morgan & Co., a copartnership in the city of New York (in said agreement called the Reorganization Managers), certain stocks, bonds, and other property representing the system formerly of the Northern Pacific Railroad Company, and in consideration of such agreement and transfer did issue and deliver to the Reorganization Managers certificates for 750,000 shares of its fully paid and nonassessable preferred stock and 800,000 shares of its fully paid and nonassessable common stock of the character described in a certain plan and agreement for the reorganization of the Northern Pacific Railroad System, dated March 16, 1896; and, furthermore, did agree at all times and in all ways and particulars to cooperate

with the Reorganization Managers and assist them in carrying into effect and in accomplishing the purposes of the said plan and agreement of reorganization; and

Whereas in and by the said plan and agreement of reorganization it was expressly provided that the right would be reserved by the new company (being the Northern Pacific Railway Company) to retire this preferred stock in whole or in part at par from time to time upon any first day of January during the twenty years succeeding the date of said reorganization agreement; it being the purpose and the intent of the said agreement that the ultimate control of the new company should be held and be exercised by the holders of the common stock, and that the preferred stock should as soon as practicable be liquidated and be paid off in cash at par; and

Whereas upon the first day of July, 1896, at a meeting of the stockholders of the Northern Pacific Railway Company, each and every stockholder being present and voting in favor thereof, a resolution was duly adopted providing for the issue of \$80,000,000 of common stock and of \$75,000,000 of preferred stock of the Northern Pacific Railway Company, and expressly prescribing that such preferred stock should be issued upon the condition that at its option the company might retire the same in whole or in part at par, from time to time upon any first day of January prior to 1917; and

Whereas at a meeting of the directors of the Northern Pacific Railway Company, duly held on the 8th day of July, 1896, a form of certificate for the preferred stock of the company, with the conditions and regulations to be incorporated therein or endorsed thereon, was duly adopted by the unanimous vote of the board of directors of the Northern Pacific Railway Company, including the following provision:

"The company shall have the right, at its option, and in such manner as it shall determine, to retire the preferred stock in whole or in part, at par, from time to time on any first day of January prior to 1917;" and

Whereas at a meeting of the stockholders of the Northern Pacific Railway Company, duly held upon July 13, 1896, the said resolution of the board of directors adopting the said form

of stock certificate to be issued for the preferred stock was duly ratified and approved by the affirmative vote of every stockholder of the company; and

Whereas each and every certificate for the \$75,000,000 of preferred stock of the Northern Pacific Railway Company containing the express provision for the retirement thereof, from time to time thereafter, was issued under and pursuant to the provisions of the said resolution of July 1, 1896, and each and every certificate for stock now outstanding contains such express provision for the retirement thereof; and

Whereas under and pursuant to section 8 of the act, chapter 244 of the private and local laws of Wisconsin, approved April 15, 1895, it was expressly provided that all the affairs of this company should be managed by a board of directors who should be stockholders, and who thereby were invested with all the powers of the corporation save as thereafter provided; and

Whereas in and by section 11 and section 12 of the said act, chapter 244 of the laws of 1895, it was expressly provided that this company might make its preferred stock convertible into common stock upon such terms and conditions as should be fixed by the board of directors, and that it might in its corporate name execute and deliver its notes, bonds, debentures, or other evidences of indebtedness in such form as from time to time should be prescribed by the board of directors, and in such amount as should be deemed from time to time by said board expedient, and might make the same convertible into its capital stock of any class upon such terms and conditions as to the board of directors might seem advisable; and

Whereas the holders of a majority of the common stock of the Northern Pacific Railway Company have requested the board of directors to take all such action as may be requisite to retire the whole of the preferred stock upon the first day of January, 1902, and have given satisfactory assurances that the necessary moneys for that purpose will be furnished, and that all action requisite for that purpose will be taken by the holders of the common stock, and

Whereas in the judgment of the board of directors of the Northern Pacific Railway Company it is desirable that this com-

pany should now exercise the option to retire the preferred stock in whole upon the first day of January, 1902:

Now, therefore, it is hereby unanimously

Resolved, (1) That the Northern Pacific Railway Company, in exercise of its right specifically expressed in each and every certificate of stock of this company, has determined, and hereby does determine, to retire the preferred stock of the Northern Pacific Railway Company, in whole, at par, upon the first day of January, 1902.

(2) That notice of the retirement of the preferred stock, substantially in the form of that annexed to the minutes of this meeting, be published in the manner prescribed by the by-laws for notice of stockholders' meetings, and that a copy thereof be mailed to every stockholder of this company.

(3) That for the purpose of raising the funds necessary to retire the preferred stock, this company will make and will issue its negotiable bonds, dated November 15, 1901, for the aggregate principal sum of \$75,000,000, payable January 1, 1907, in gold coin of the United States of the present standard of weight and fineness, at this company's office in the city of New York, with interest in like gold coin at the rate of four per cent per annum from January 1, 1902, payable semi-annually at said office. Every such bond shall be convertible into shares of the common stock of this company at the rate of one share of \$100 for each \$100 of the principal sum of such bond remaining unpaid at the date of such conversion; and upon surrender to it of any such bond this company will issue to the holder of such surrendered bond shares of this company's common stock at the rate aforesaid. Such conversion may be made by the company at its option at any time after November 15, 1901, and shall be made at the demand of any holder of any such bond at any time on or after the first day of January, 1902. Such bonds shall be coupon bonds or registered bonds, in denominations each of \$1,000, or of some multiple thereof, and shall be in such form as shall be determined by the president or the vice-president of this company. Every such bond shall be subscribed by the president or a vice-president and by the secretary or an assistant secretary and shall be issued under the corporate seal.

(4) That the president and vice-president of this company,

and each of them, be, and hereby they are, authorized and empowered to contract to sell and to sell all or any of said bonds at a price not less than par and accrued interest; and in such contract to provide for the delivery of all or any part of said bonds upon receiving such payment therefor on or prior to or after December 31, A. D. 1901; and also to covenant and agree that any and all moneys received for said bonds shall be specifically appropriated and used exclusively for the retirement of the preferred stock at par; and accordingly it is hereby expressly declared that all such proceeds shall be set apart and shall be held as a trust fund for such purpose.

Any such contract for delivery of such bonds prior to January 1, 1902, may provide for the payment of the whole or any part of the purchase price of said bonds with allowance of interest, at a rate not exceeding four per cent per annum from the time of the receipt of the price of such bonds until January 1, 1902, the date when such bonds begin to bear interest.

Any and every such contract shall contain a provision giving to the holder of every share of this company's common stock now outstanding suitable opportunity on demand to receive through or from the purchaser of said bonds under said contract, at a price not exceeding par and accrued interest, such bonds (or a like amount of common stock received upon conversion of such bonds, if theretofore converted) to an amount equal to seventy-five eightieths of the par amount of said common stock at such time owned by such holder; and for the purpose of providing for subdivision of interests, suitable certificates representing fractional interests in bonds from time to time may be issued, and may be redeemed in such manner as shall be determined by the president or the vice-president.

(5) That the proper officers of this company be, and hereby they are, directed, out of the proceeds of said bonds, and out of any other moneys in the company's treasury available for that purpose, pay at the company's New York office, to each holder of record of the preferred stock of this company, on and after January 1, 1902, upon surrender of the certificates for such stock, \$100 for each and every of the shares of preferred stock for which the certificates shall be so surrendered.

(6) That all of the preferred stock of this company be, and

hereby it is, declared to be retired from and after December 31, A. D. 1901, and that from and after that date all of the authorized capital stock of this company, fixed at \$155,000,000, by resolution of this company's stockholders at the meeting thereof held on the first day of July, 1896, be of one kind and be without preference in favor of any part thereof, and the total authorized capitalized stock of this company continue to be \$155,000,000, as so fixed at said meeting.

(7) That the president, the vice-president, the treasurer, and the secretary of the Northern Pacific Railway Company be, and hereby they are, authorized from time to time to take all proceedings and to do all acts necessary or suitable to carry these resolutions fully into effect.

(8) That for the purpose of the retirement of the preferred stock, the transfer books of the stock of this company be closed at three o'clock p. m. on Tuesday, December 10, 1901, and that the transfer books of the common stock be reopened upon Thursday, January 2, 1902, at ten o'clock a. m.

On motion, the following resolutions were adopted:

Resolved, That the action of the executive committee in declaring from the net earnings of this company a dividend of one per cent on the preferred stock of this company, to be paid December 5, 1901, to the holders of record of preferred stock at the closing of the transfer books on November 8, 1901, be, and hereby the same is, ratified and confirmed.

Resolved, That there be, and hereby there is, declared from the net earnings of this company a final dividend of one per cent on the preferred stock of this company, the same to be paid on or after January 1, 1902, to the holders of record at three o'clock p. m. on Tuesday, December 10, 1901, at which time the transfer books are to be closed for the retirement of the preferred stock under the resolutions of this company.

The executive committee reported by the reading of the minutes of its meetings held October 7th and 21st and November 4th, 1901, and on motion the committee's action as reported was approved, ratified and confirmed.

On motion, it was

Resolved, That the following treasury securities be sold to the

Northwestern Improvement Company as of October 31, 1901,
at and for the prices named, to wit:

\$330,000.00 prior lien bonds at 105.....	\$346,500.00
1,800,000.00 general lien bonds at 70.....	1,260,000.00
260,000.00 St. Paul-Duluth Div. bonds at 100..	260,000.00
9,000.00 Minnesota transfer bonds at 100...	9,000.00
2,000,000.00 N. W. Improvebent Co. stock at 75.	1,500,000.00
2,245,000.00 Wash. and Col. River Ry. inc. bonds at 40	898,000.00
280,000.00 Washington Central bonds at 90...	252,000.00
323,183.64 Montana R. R. notes.....	323,183.64
381,992.24 Minn. and International notes.....	381,992.24
762,393.01 Brainerd and No. Minn. notes.....	762,393.01
<hr/>	
8,391,568.89	5,993,068.89

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On motion, it was

Resolved, That the action of the president of this company in executing, and the action of the assistant secretary, R. H. Relf, in executing, attesting, and affixing the corporate seal to a certain bond on behalf of this company as principal, and Charles S. Mellen and Daniel S. Lamont, as sureties unto the United States of America for twenty-five thousand dollars, covering northerly 350 feet of Ocean Warehouse No. 1, situate on the water front at Tacoma, Washington, which bond bears date November 4, 1901, are hereby fully ratified and confirmed, and said bond is made hereby the valid obligation of this company.

The president submitted a map, in duplicate, of the definite location of an extension of this company's Gaylord and Ruby Valley Branch, from a point in the north line of section 34, township 3 south, range 6 west, of Montana principal meridian, thence in a generally southeasterly direction to and up the valley of the Ruby River, and to a point in the south line of section 9, township 6 south, range 4 west, of the same meridian, a distance of 19.17 miles, all in Madison County, Montana.

On motion, it was

Resolved, That the map this day submitted showing the line of route of the extension of this company's Gaylord and Ruby

Valley branch be, and the same is hereby, adopted as the route of definite location of the extension of said branch.

On motion, it was

Resolved, That the Standard Trust Company of New York, as trustee under the trust indenture securing Northern Pacific-Great Northern, C., B. and Q. collateral 4 per cent joint bonds, dated July 1, 1901, be, and hereby is, authorized to cremate from time to time, in the presence of this company's representative, coupon bonds issued under said trust indenture received and cancelled by said trustee in exchange for registered bond certificates issued under said trust indenture, provided that the said trustee shall thereupon deliver to this company a certificate of such cremation in satisfactory form, which certificate shall be accepted by this company as the delivery of the cancelled coupon bonds prescribed by section 4 of article one of said trust indenture.

On motion, it was

Resolved, That the Farmers' Loan and Trust Company, as trustee under the general second, general third, and consolidated mortgages of the Northern Pacific Railroad Company, be, and hereby is, authorized to cremate, in the presence of this company's representative, coupon bonds issued under any of said mortgages received and cancelled by said trustee in exchange for registered bond certificates issued under said mortgages, and to cremate in like manner all coupon bonds now in its possession engraved for issuance but never issued.

On motion, it was

Resolved, That the action of the president in selling to the insurance fund the securities below mentioned be, and the same is hereby, approved, to wit:

\$39,000 Northern Pacific Railway Co. general lien 3 per cent. bonds, at 70.....	\$27,300
\$7,000 Northern Pacific Railway Co. prior lien 4 per cent bonds, at 105.....	7,350
\$9,000 Northern Pacific Railway Co. St. Paul-Duluth Division 4 per cent bonds, at 100.....	9,000
\$6,000 Washington Central Railway Co. 4 per cent. bonds, at 90	5,400
	<hr/>
	\$49,050

The treasurer's statement showing average bank balances for the quarter ending September 30, 1901, was submitted and ordered filed.

The following schedules showing the execution of deeds, leases, and miscellaneous documents during September, 1901, were submitted:

Schedule of land department deeds executed by the Northern Pacific Railway Company, aggregating 60,446.62 acres, for \$117,926.14.

Schedule of land department deeds executed by the Northwestern Improvement Company, aggregating 15,802.04 acres, for \$43,806.71.

Schedule of leases of right of way and other operating department property.

Statement of miscellaneous deeds, contracts, and relinquishments.

Schedule of land department leases executed by the Northern Pacific Railway Company, western division.

On motion, the execution of deeds, leases, etc., this day reported was approved, ratified, and confirmed.

The following schedules showing the execution of deeds, leases, and miscellaneous documents during October, 1901, were submitted:

Schedule of land department deeds executed by the Northern Pacific Railway Company, aggregating 80,648.94 acres, for \$168,323.34.

Schedule of land department deeds executed by the Northwestern Improvement Company, aggregating 24,017.66 acres, for \$50,007.35.

Schedule of leases of right of way and other operating department property.

Statement of miscellaneous deeds, contracts, and relinquishments.

Schedule of land department leases executed by the Northern Pacific Railway Company and the Northwestern Improvement Company.

On motion, the execution of deeds, leases, etc., this day reported was approved, ratified, and confirmed.

On motion, the meeting then adjourned.

GEO. H. EARL, *Secretary*.

APPENDIX 6.

CIRCULAR LETTER TO GREAT NORTHERN STOCKHOLDERS.

The following is a copy of a circular issued by the Northern Securities Company, November 22, 1901, to holders of stock of the Great Northern Railway Company.

[Northern Securities Company. James J. Hill, president; John S. Kennedy, first vice-president; George F. Baker, second vice-president; D. Willis James, third vice-president; W. P. Clough, fourth vice-president; E. T. Nichols, secretary and treasurer.]

27-29 PINE STREET,

New York City, November 22nd, 1901.

To holders of stock of the Great Northern Railway Company:

The Northern Securities Company, incorporated under the laws of the State of New Jersey, with an authorized capital stock of \$400,000,000, and with power to invest in and hold the securities of other companies, has commenced business, and has acquired from several large holders of stock of the Great Northern Railway Company a considerable amount of that stock.

A uniform price has been paid of \$180 per share, in the fully paid stock of this company, at par. This company is ready to purchase additional shares of the same stock at the same price, payable in the same manner, and will accept offers made on that basis if made within the next sixty days.

Offers for sale of stock of the Great Northern Railway Company should be made upon the enclosed form, and should be accompanied by the certificates of the stock offered with transfers duly executed, having United States stamps for transfer tax of two cents per share affixed.

Upon receipt of any such offer, so accompanied, the Northern Securities Company will deliver to the seller of the stock of the Great Northern Railway Company certificates of its own stock

to the amount of the purchase price above named, or, if such certificates are not then ready for delivery, its negotiable receipt obliging it to issue and deliver such certificates as soon as ready. For fractional parts of shares scrip certificates convertible into stock in multiples of \$100 will be given.

NORTHERN SECURITIES COMPANY,
By JAMES J. HILL, *President*.

To the NORTHERN SECURITIES COMPANY,

New York:

The subscribers hereby offer to sell and deliver to the Northern Securities Company ——— shares in the capital stock of the Great Northern Railway Company, represented by the certificates hereto attached, for the price of one hundred and eighty dollars (\$180) per share, payable in the fully paid stock of the Northern Securities Company, at par, in accordance with the terms of the circular of the latter-named company, dated November 22nd, 1901.

The stock of the Northern Securities Company to be paid in accordance with the foregoing tender should be issued as follows:

Shares.	Name.	Full address.
.....
.....
.....

Dated ———, 190—.

APPENDIX 7.

CIRCULAR ON DISTRIBUTION OF STOCK.

NORTHERN SECURITIES COMPANY.

Directors.

Daniel S. Lamont,	Robert Bacon,
John S. Kennedy,	George F. Baker,
Edward T. Nichols,	George C. Clark,
George W. Perkins,	William P. Clough,
Jacob H. Schiff,	Edward H. Harriman,
James Stillman,	James J. Hill,
Nicholas Terhune,	D. Willis James,
	Samuel Thorne.

26 Liberty Street,

New York, March 22, 1904.

To the Stockholders of the Northern Securities Company:

Since the formation of your company with a view of promoting, developing and enlarging the commerce and traffic of the country served by the Great Northern and Northern Pacific Railway Companies, and by the Chicago, Burlington and Quincy Railroad Company, the traffic and earnings of the three railways have largely increased. Rates paid by the public have been materially reduced. The respective railways have been extended and their condition and facilities improved and increased.

The stock of the Northern Securities Company was issued solely for the shares of the Northern Pacific and Great Northern Railway Companies, and other properties purchased by it.

In forming the company and disposing of its shares, no commissions were paid nor has the company incurred any expenses save those necessary for obtaining its charter, and for the economical conduct of its affairs.

The company's acquisition of Northern Pacific and Great Northern shares was made in the full belief that such purchases

were in no wise obnoxious to any law of the United States—an opinion which has received the approval of four justices of the supreme court of the United States, namely, Mr. Chief Justice Fuller, and Associate Justices Edward D. White, Rufus W. Peckham and Oliver Wendell Holmes, in the suit brought by the United States against the right of the company to hold and vote the shares. However, the majority of the court, disregarding as irrelevant any beneficial increase of commerce, was of the opinion, that as a matter of law your company's holding of the stocks of the two railway companies in itself constituted a restraint of interstate commerce prohibited by the so-called Sherman Act of 1890. Accordingly the railway companies have been forbidden to permit your company to vote or to collect dividends on the shares held by it.

Therefore, your directors, at a meeting held this day, have, under advice of counsel, decided that in order to fully and promptly comply with the decree in this suit, it is necessary to reduce the capital stock of the company, and to distribute to its shareholders the shares of stock of said railway companies now held by it.

To this end they have adopted resolutions recommending to the stockholders

First. That the capital stock of this company be reduced from 3,954,000 shares, now outstanding, to 39,540 shares, being a reduction of 99 per centum.

Second. That said 99 per cent. of the present outstanding shares be called in for surrender and cancellation.

Third. That against each share of the stock of this company so to be surrendered, there will be delivered

\$39.27 stock of the Northern Pacific Railway Company,

\$30.17 stock of the Great Northern Railway Company,

and proportionate amounts thereof for each fraction of a share of stock of this company so to be surrendered.

As required by the laws of the State of New Jersey, under which the company was created, a special meeting of the shareholders of this company has been called by the board of directors, for Thursday, April 21, 1904, at eleven o'clock in the forenoon, at the office of the company, 51 Newark Street, Hoboken, N. J.,

to vote upon said resolutions and upon such other business as may be brought before said meeting.

For the purpose of this meeting, the stock transfer books will be closed April 18, 1904, at three o'clock P. M.

Holders of this company's stock to a large extent have already expressed their approval of the recommendations of the board, but the laws of New Jersey require a two-thirds vote of the shareholders to permit the company to reduce its capital stock. Such vote is the first step necessary for the proposed distribution of the railway companies' shares. The collection of the May and subsequent dividends on such shares being forbidden by the decree until such distribution has been made, the importance of promptly executing and forwarding proxies is obvious.

The assets of the company remaining in its treasury after the foregoing distribution is made, will consist of stocks and other property in no way involved in the suit, producing income, and conservatively valued at an amount in excess of the \$3,954,000, to which it is proposed to reduce the stock of your company.

Notice of the due approval by the special meeting of the recommendations of the board of directors will be immediately published, whereupon, stockholders should deliver their *entire* holdings of stock at this office promptly on and after April 23, 1904. Against such delivery, certificates for the one per centum thereof to be retained by stockholders, will be returned to them, together with the amount of stock of each of said railway companies, to which they may become entitled as above, on account of the ninety-nine per centum of their holdings of Northern Securities stock surrendered for cancellation. Fractional parts of shares will be adjusted by the delivery of scrip certificates.

All stock surrendered must be fully executed for transfer, either upon the certificates or upon an attached power of transfer.

By order of the board of directors,

JAMES J. HILL,

President.

EDWARD T. NICHOLS,

Secretary.

APPENDIX 8.

LETTER TO STOCKHOLDERS.

NORTHERN SECURITIES COMPANY,
26 Liberty Street,

New York, June 11, 1904.

To the Stockholders:

A circular recommending reduction of the capital stock of this company and a ratable distribution of its railway shares as surplus assets was issued March 22, 1904.

Shortly thereafter Messrs. Harriman and Pierce and the Oregon Short Line Railroad Company petitioned the circuit court for the District of Minnesota for leave to intervene in the suit of the United States against this company, asking that this company should deliver to them \$78,108,000 stock of the Northern Pacific Railway Company (part of the common assets of this company), instead of their ratable proportion of such assets as proposed by your directors in that circular. The court denied the petition.

About the same time, another suit on similar grounds was brought against this company in the Court of Chancery of the State of New Jersey by the Continental Securities Company, Clarence H. Venner, president. In this suit an injunction was asked forbidding the holding of your special meeting called for April 21, 1904.

The court refused to grant the injunction, holding that this company had title to the stocks of the Northern Pacific and Great Northern Railway Companies, that their proposed distribution was in conformity with the laws of New Jersey (the State in which this company is incorporated), and in no way violative of the decrees of the United States court.

On the 20th of April, 1904, Messrs. Harriman and Pierce and the Oregon Short Line Railroad Company began another suit

against this company in the circuit court of the United States for the District of New Jersey, on grounds, and making claims, similar to those in their application in the State of Minnesota. In this case there has been a hearing on plaintiff's motion for a preliminary injunction to restrain this company from parting with the particular stock claimed by them. An early decision on this motion is expected.

The special meeting of stockholders was held April 21, 1904. Those present, representing nearly 75 per cent of the capital stock of the company, unanimously adopted resolutions reducing its stock to \$3,954,000, and providing for the ratable distribution of its railway shares as surplus assets recommended by your directors in the circular of March 22, 1904.

The Northern Pacific and Great Northern Railway Companies declared, at the usual dates, quarterly dividends of $1\frac{3}{4}$ per cent on their respective shares, payable May 2, 1904, to those persons in whom the title to such shares shall be found to vest.

Cash to pay these dividends has been set apart and deposited in bank for that purpose by both railway companies and payment thereof will immediately follow the distribution and formal transfer of the railway shares.

Your company is advised that the earnings and income of the railway companies in which it is interested as a stockholder continue satisfactory.

Respectfully,

JAMES J. HILL,
President.

APPENDIX 9.

BALANCE SHEET.

NORTHERN SECURITIES COMPANY,

26 Liberty Street, New York.

To the Stockholders of the Northern Securities Company:

The reduction of the company's capital stock from \$395,400,000 to \$3,954,000, made by the amendment to its Certificate of Incorporation adopted by the stockholders at their special meeting held on April 21, 1904, having in all respects been sustained by the unanimous decision of the supreme court of the United States, became finally effective from and after April 18, 1905, by the filing, on that date, in the proper office of the State of New Jersey, of the Certificate of Amendment.

The *pro rata* distribution of the company's holdings of Northern Pacific and Great Northern shares, in process of carrying out the reduction of its own capital stock, has substantially been completed. Considerably less than one-hundredth part of one per cent of the company's original stock, held in small, scattered lots, remains to be surrendered.

From the company's remaining assets, represented by its reduced capital stock, it has received, during the current business year, ending December 31, 1905, income sufficient to permit payment to holders of that stock of a dividend of five per centum upon the amount thereof.

Your board of directors has accordingly declared a dividend at that rate, payable on January 10, 1906, to holders of record on that date of shares of the reduced capital stock.

For your information herewith are transmitted a revenue account, a general statement of transactions and a balance sheet, prepared by the company's secretary and treasurer, affording, in concise form, a complete view of the company's business operations from the commencement to the present date.

By order of the Board of Directors,

JAMES J. HILL,
President.

December 31, 1905.

Revenue account from November 13, 1901 (date of organization), to December 31, 1905.

To taxes paid—State of New Jersey.....	\$85,179 09	
State of New York.....	449 83	
United States—On original issue of stock.....	174,285 51	
To interest and exchange.....	\$259,914 53	
To expense of administration.....	186,685 69	
To legal expenses.....	264,038 76	
To dividends paid on stock of Northern Securities Co.....	385,420 71	
To balance, surplus revenue carried to profit and loss account.....	81,259,620 63	
	2,231,007 20	
	<u>\$39,886,683 52</u>	

By dividends collected on stocks belonging to the company.....

\$39,886,683 52

Balance sheet, December 31, 1905.

To organization expense (including \$30,000 incorporation fee paid to the state of New Jersey).....	\$85,048 35	
To investments: Stocks now owned other than Northern Pacific and Great Northern.....	6,047,806 73	
To cash.....	420,768 20	
	<u>\$39,886,683 52</u>	
By capital stock.....	\$3,954,000 00	
By profit and loss:		
Surplus revenue.....	\$2,281,007 20	
Premium on 75,220 shares stock of Northern Securities Co. sold in market.....	838,902 50	
Northern Securities stock bought and cancelled.....	\$2,643 75	
Less cash cost of same.....	2,579 02	
Profit on Nor. Pac. and Gt. Northern stock sold.....	264 73	
	<u>70,996 95</u>	
	<u>\$3,191,171 38</u>	
Deduct value of Nor. Pac. and Gt. N. stocks distributed to Nor. Sec. stockholders under stockholders resolution of April 21, 1904.....	\$382,037,748 10	
Less Nor. Sec. stock retired against that distribution.....	391,446,000 00	
	<u>\$691,748 10</u>	
	<u>\$2,599,423 28</u>	
	<u>\$6,553,423 28</u>	

(Capital stock represents 1 per cent of the old capital stock of \$39,400,000 of which 99 per cent (\$39,146,000) was retired when the stockholder's resolution of April 21, 1904, went into effect. Certificates for \$27,180 of the old stock remain outstanding. One percent of this amount (\$271) is included in the \$3,954,000 of present capital stock. The remaining 99 per cent thereof (\$23,529) was retired by the resolution of April 21, 1904, and now represents a claim upon the Northern Securities Company for \$10,385.51 Northern Pacific stock and \$3,094.41 Great Northern stock, which stocks the Northern Securities Company holds for delivery upon surrender to it of the old Northern Securities certificates.)

Statement showing issuance of capital stock and its subsequent reduction; application of capital stock and of its cash proceeds; funds derived from other sources; purchase of securities, their cost and how provided for; other disbursements; final disposition of Northern Pacific and Great Northern stocks under stockholder's resolutions of April 21, 1904, and otherwise.

	Cost.	How PAID FOR.	
		Stock of N. S. Co.	Cash.
Investments:			
440,850 shares N. P. pfd. (H. & P. purchase)	\$41,085,000 00	\$52,169,371 00	\$8,915,629 00
370,230 shares N. P. Com. (H. & P. Purchase)	50,322,500 00	50,322,500 00	
Total price paid to H. & P.			
820,273,625 shares N. P. stock @ 115 per cent.	\$91,407,500 00	\$82,491,871 00	\$8,915,629 00
347,090,625 shares N. P. stock obtained from N. P. Ry. Co. in exchange for \$34,709,062.50 N. P. convertible bonds bought at par for cash.....	94,331,467 75	94,331,122 75	345 00
Total, 1,537,594.25 shares costing	\$135,739,067 75		\$8,915,629 00
Less, 1,537,594.25 shares disposed of for	\$179,403,551 44		34,709,062 50
Excess proceeds to P. & L. account.....		211,037,650 00	
1,172,542.50 shares G. N. Pfd. @ 180 per cent.			1,707,200 00
8,700.00 shares G. N. Pfd. bought for cash.			
Total, 1,181,242.50 shares costing	\$212,764,850 00		
Less, 1,181,242.50 shares disposed of for	\$212,765,325 76		
Excess proceeds to P. & L. account.....			
Other stocks purchased.....	6,047,606 73		6,047,606 73
Gross cost of investments	\$439,290,456 98	\$387,890,643 75	\$51,370,843 23
Deduct proceeds investment, contra.....		^a	
Less profit on N. P. and Gt. N. stocks.....	\$433,283,877 20		
Net cost of "other stocks"	\$6,017,606 73		
Organization expense.....			
Cost of \$2,643.75 N. S. stock bought and cancelled (see contra.) to reduce stock to even amount			
Cash in treasury—see balance sheet.....			
			\$51,868,038

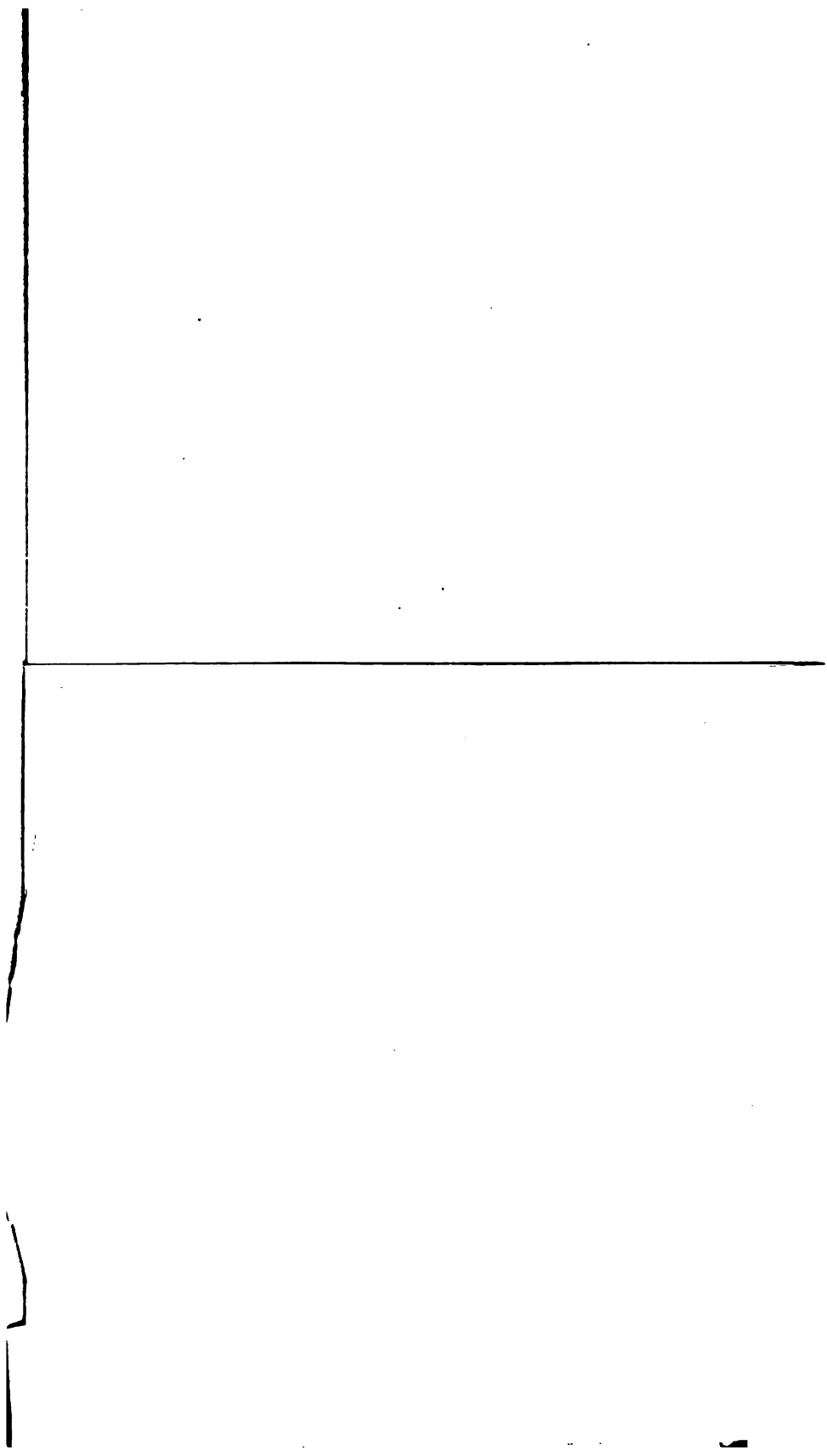
		Cash.
Capital stock:		
Issued to incorporators at par for cash.....	\$30,000 00	\$30,000 00
Issued and sold in market to pay for 8,700 shares Gt. N. stock.....	1,537,400 00	1,721,894 25
Issued and sold in market for general purposes.....	5,934,800 00	6,039,038 25
Total capital stock sold for cash..... ^a	77,322,000 00	\$8,380,932 50
Issued for property for statement contra..... ^a	387,386,643 75	
Total capital stock issued.....	\$386,402,643 75	
Less: Purchased in market (see contra) and cancelled to reduce stock to even amount. ^b	82,643 75	
Retired by stockholders' resolutions of April 21, 1904..... ^f	391,448,643 75	
Reduced capital stock now outstanding..... ^f	\$8,964,000 00	
Securities disposed of:		
Nor. Pac. Pfd. stock—410,830 shares redeemed by N. P. Ry. Co. at par for cash.....		^c 41,085,000 00
Nor. Pac. stock		^j
383,838 shares sold for cash.....	\$85,532 28	86,532 28
1,537,208,3662 shares distributed at cost.....	179,317,969 16	
Total.....	\$179,403,501 44	^d
Gt. Nor. Pfd. stock		
249,9932 shares sold for cash.....	\$75,546 82	75,546 82
1,180,962,5018 shares distributed at cost.....	212,719,778 94	^k
Total.....	\$212,795,325 76	^e
Surplus revenue..... ^g		2,251,007 20
		\$51,869,068 90

Having made an audit of the accounts from the organization of the company to December 31, 1905, and verified cash on hand, securities owned and capital stock outstanding, we certify that in our opinion the foregoing revenue account, balance sheet and related general statement are correct.

EDWARD T. NICHOLS, *Secretary and Treasurer.*

By E. T. PEARSON, *General Manager.*







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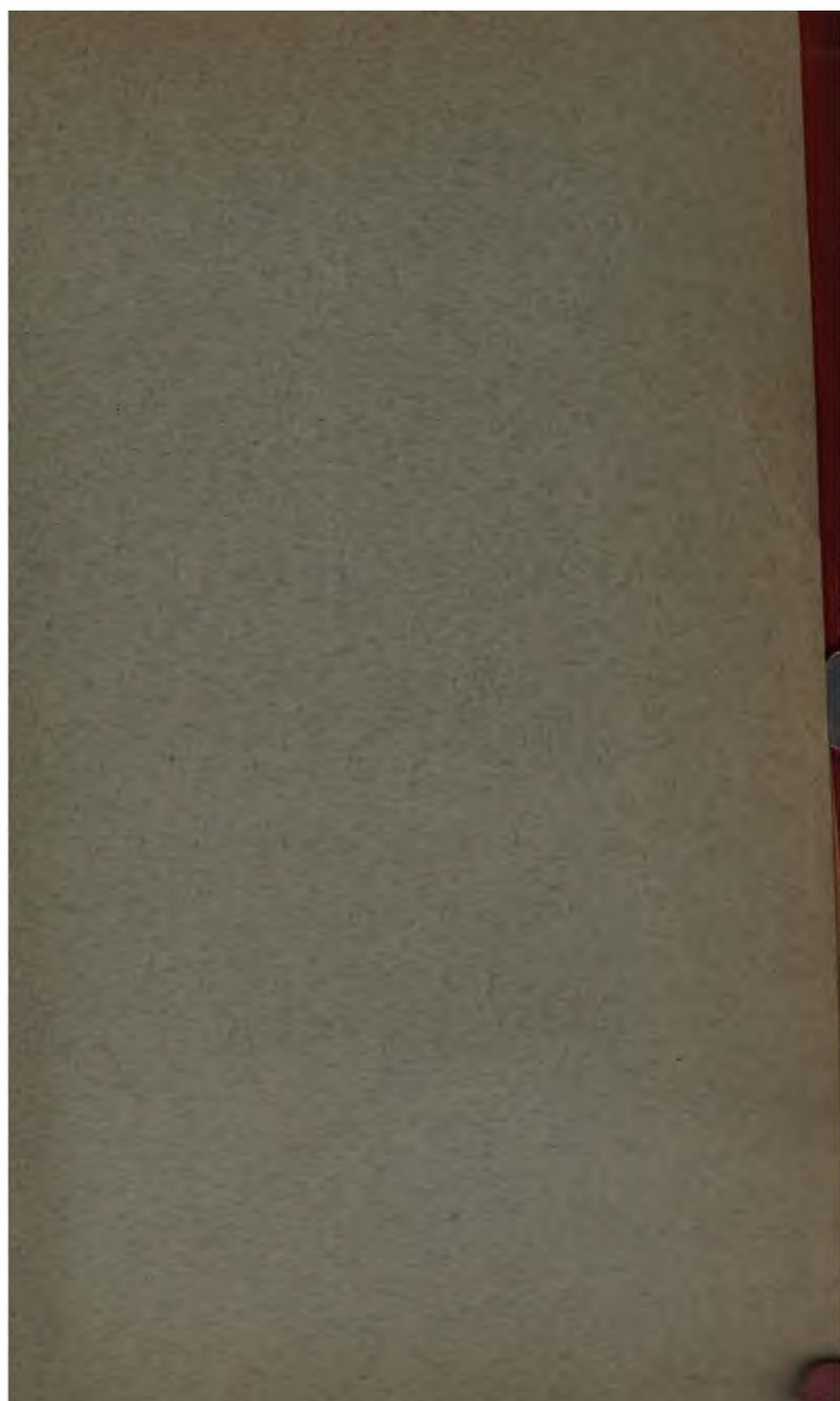
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